DOCUMENT RESUME

ED 181 440 CS 005 220

AUTHOR	Deffenbaugh, Sue A.
TITLE	The What's, Why's and How's of Inservice Education in Reading in the Content Areas.
INSTITUTION	Hartford Public Schools, Conn.: Hartford Univ., West Hartford, Conn.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C. Teacher Corps.
PUB DATE	79
GRANT	G007700062
NOTE	63p.
AVAILABLE FROM	Teacher Corps, Rm. H128, University of Hartford, West Hartford, CT 06117 ($1.50)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	*Content Reading; Elementary Secondary Education; *Inservice Programs; *Inservice Teacher Education; Program Content; Program Development; Program Planning; Reading Improvement; *Reading Instruction; Resource Materials; Teaching Methods
IDENTIFIERS	*Teacher Corps

ABSTRACT

This resource guide, based on ideas drawn from Teachers Corps projects, contains suggestions for organizing and conducting inservice programs on reading in the content areas. The first section of the guide provides guidance from the literature concerning decisions to be made in establishing an inservice program, including suggestions from experienced inservice leaders and descriptions of models of workable programs. The second section discusses inservice activities, such as ways of creating awareness and examining beliefs, exploring the demands of the reading assignments, investigating skills in content area reading, developing vocabulary instructional techniques, and developing instructional techniques in comprehension. Resources for the inservice leader are provided in the third section, specifically resources for structuring and conducting inservice sessions, for information about reading and teaching strategies in the content areas, and for information about learning-to-learn skills. The final section outlines issues and perspectives, including discussions of teaching reading in the content areas, other considerations for classroom instruction, and inservice planning. A selected bibliography is included. (FL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED181440

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

THE WHAT'S, WHY'S AND HOW'S OF INSERVICE EDUCATION IN READING IN THE CONTENT AREAS

Sue A. Deffenbaugh
University of Hartford/Hartford Public Schools
Teacher Corps Project

Spring, 1979

CS005220

FEB 26 1980

UNIVERSITY OF HARTFORD
200 Bloomfield Avenue
West Hartford, Connecticut 06117

This book was produced under Grant #G007700062 to Hartford Public Schools/University of Hartford from the United States Office of Education, Teacher Corps. The opinions expressed herein should not necessarily be construed as representing the opinions of the United States Office of Education. Nor should they be construed as necessarily representing the policy or opinion of any other agency or organization.

Preface

The teaching of reading in the content areas has become a very important process for subject matter teachers across the nation. Unlike elementary school teachers where the focus is on teaching children how to read, the emphasis on the secondary level has been specifically on teaching children how to read for content. In the secondary schools, most students read mainly from subject matter materials. The skill emphasis of elementary school changes significantly to an emphasis on ideas. The shift from learning to read to reading to learn is managed well by some students but creates problems for others. This book focuses on ideas and techniques for training classroom teachers to structure content area instruction in ways that help students in reading to learn.

It is crucial for teachers of special subjects to become more aware of the nature of the reading problems of secondary students and to seek ways to help these students acquire better skills to assure success in content courses. In order to effect positive change in content reading on the secondary level, teachers must develop different attitudes and begin to view reading as a process through which the ideas of each discipline can be taught. Language instruction must be viewed as the foundation for bringing together the student and the subject. Inherent in language is listening, speaking, reading and writing. The integration of these language skills with content reading will provide more wholesome teaching-learning environments for students where content experiences require them to process their thoughts into language.

Reading problems at the secondary level can be resolved if reading skill instruction is combined with the teaching of subject matter. Secondary teachers can foster this effort through sincere, determined commitments. The time has come for all teachers to view learning to read and reading to learn as serious processes for all secondary students.

Teacher Corps projects across the nation and other programs designed to improve the educational opportunities for children should take leadership roles in effecting the kinds of changes that are needed to accomplish this end. This book should be of invaluable assistance to them in this endeavor.

Preston M. Royster
Associate Director, Operations
Teacher Corps

Foreword

This manual is the result of Teacher Corps' recognition of the importance of teaching reading within the content areas and the role Teacher Corps Projects across the nation can play in promoting better instruction for students by emphasizing reading in the content areas.

In October of 1978, a national Teacher Corps Task Force on Reading in the Content Areas was established. This Task Force met in Washington, D. C., and discussed successful strategies for conducting inservice in reading in the content areas, ways Teacher Corps Projects might facilitate such inservice programs and the general design for this resource manual. The Task Force members whose valuable ideas and extensive experiences helped shape this resource guide were:

Dr. Gwendolyn H. Austin
Secondary Education Coordinator
Teacher Corps
Washington, D. C.

Dr. Mary Bacon
Ravenswood School District
Teacher Corps
East Palo Alto, California

Ms. Willie J. Butler
Vice Principal
Patterson Junior High School
Baltimore, Maryland

Dr. John J. Campbell
Professor
Howard University
Washington, D. C.

Dr. Barbara Cannon
Consultant
Palo Alto, California

Dr. Sue Deffenbaugh
Associate Professor
University of Hartford
West Hartford, Connecticut

Ms. Elizabeth Gerald
Program Specialist Reading Coordinator
Teacher Corps
Washington, D. C.

Dr. Harold Herber
Professor
Syracuse University
Syracuse, New York

Dr. Kara Vaughn Jackson
Associate Director, Teacher Corps
Grambling State University
Grambling, Louisiana

Ms. Shirley Jackson
Director, Right-to-Read
Office of Education
Washington, D. C.

Dr. Olive S. Niles
Consultant, Reading
State Department of Education
Hartford, Connecticut

Dr. Howard Pulman
Director, Teacher Corps
Youngstown State University
Youngstown, Ohio

Mrs. Eleanora Ridgley
Program Specialist
Teacher Corps
Washington, D. C.

Dr. Preston Royster
Associate Director, Operations
Teacher Corps
Washington, D. C.

Ms. Audrey Sieger
Consultant
New York University
New York, New York

The Hartford Public Schools/University of Hartford Teacher Corps Project, Cycle XII, supplied generous technical and financial support for the preparation of this manual. Additionally, the Teacher Corps Project provided an on-site inservice setting in which to refine many of the techniques and activities suggested in this manual. The assistance of the Teacher Corps staff, the teachers and the Project interns was extremely valuable.

Special thanks is extended to Dr. Beverly Kelton, Director of the Hartford Teacher Corps Project. Her consistent support and encouragement were greatly appreciated.

Sue A. Deffenbaugh
Spring, 1979

TABLE OF CONTENTS

Introduction 1
- Purpose of Inservice Resource Guide 1
- Teacher Corps Projects and Reading in the Content Areas 2

Decisions to be Made: Guidance from the Literature .. 4
- Experienced Inservice Leaders' Suggestions 4
- Inservice Programs: Workable Models 8
- Summary 16

Suggested Inservice Activities 17
- Creating Awareness and Examining Beliefs 17
- Exploring the Demands of the Reading Assignments 22
- Investigating Skills in Reading in the Content Areas 24
- Developing Vocabulary Instructional Techniques 26
- Developing Instructional Techniques in Comprehension 27

Resources for the Inservice Leader 31
- Resources for Structuring & Conducting Inservice:
  - Books 31
  - Prepared Materials 32
- Resources for Information about Reading & Teaching Strategies in the Content Areas:
  - Bibliographies 34
  - Books 36
  - Manuals and Resource Guides 45
- Resources for Information about Learning-to-Learn Skills 47

Issues and Perspectives: A Summary by Elizabeth Gerald 51
- Teaching Reading in the Content Areas 51
- Other Considerations for Classroom Instruction 53
- Inservice Planning 54

Selected Bibliography 55

Introduction

"I'm a history teacher, not a reading teacher. I have all this material to teach. I don't have time to teach reading, too. Besides I don't know anything about teaching reading."

-junior high history teacher

This is a typical comment heard across the country during the first sessions of most inservice series on reading in the content areas. Although content-area teachers are frustrated by their students' seeming inability to do the required reading, they feel pressured to "cover the material" established by the school system. They often resent the suggestion that they are expected to teach anything related to reading; they are unsure of their own ability to help their students with the reading process. Additionally, they tend to be very skeptical about the value of inservice activities in general and those on reading in particular.

The teachers, however, are concerned about their students; they do not wish to see them fail. It is this concern that brings the teachers, although sometimes reluctantly, to the realization that inservice on reading in the content areas may provide valuable information and strategies to help them examine and refine their teaching techniques and their approaches to reading within their own classes. In order for the sessions to be successful, however, the teachers need to understand from the very beginning that they are not expected to teach phonics or to use "remedial reading" materials. They need sessions in which practical ideas are applied to their own content areas and their own textbooks. They need to realize that, although the ideas may take time to implement and refine, the techniques will help their students learn the content information more efficiently and effectively. They need to believe that they, the classroom teachers, are the best qualified people to teach the reading skills necessary for mastering their particular subject areas. They need time to think, to create, to consult, and to experiment.

Purpose of Inservice Resource Guide

The purpose of this resource guide for the inservice leader is, therefore, to provide ideas and suggestions for organizing and conducting inservice sessions for content-area teachers. It is not designed to detail teaching techniques for classroom use or to give a step-by-step procedure or to dictate what to teach in the inservice sessions. To do so would be to ignore the expertise, experience and knowledge of the inservice leader selected to conduct the sessions. Rather, the guide is organized to place at one's fingertips, as it were, ideas reported in the literature, suggestions from successful inservice leaders, and varied information sources.

The resource guide is built on the belief that the reading and learning skills necessary for mastery of a particular content area are best taught by the classroom teacher as part of the daily instruction when the skills are needed for a particular lesson. The guide is not designed as a remedial reading manual. The term "reading in the content areas," as used in the field today,

implies that students can read the textbooks to some extent; they are not non-readers or lacking fundamental word recognition skills. Although they may have difficulty pronouncing some multisyllabic words or need assistance with word meaning and main idea skills, they are generally able to read and understand at some minimal level. Undoubtedly, in every content area classroom there are some students who do not meet these minimal criteria. They probably in some other setting are receiving remedial assistance, possibly under a diagnostic-prescriptive approach. The content area teacher's primary responsibility for these students, as well as for all his/her students, is to help them learn the content material.

For the severely-deficient readers this learning will come through modes other than reading. Although the techniques such as vocabulary discussions and overview guides that a content-area teacher may use in helping students read the textbook should help the extremely poor readers learn the content through the listening mode, the techniques will not enable them to read the required textbook. Other adjustments for learning will need to be made for these students. Ideas and techniques associated with "reading in the content areas" are for the majority of students - the weak as well as the gifted reader - in content classrooms. The materials included in this resource guide have been selected with this distinction between reading in the content areas and remedial reading instruction clearly in mind.

The ideas suggested in this resource guide have also been selected in accordance with the following five specific assumptions. Although there may be differences of opinion about some of these, they seem to reflect the thinking of most experts in the field today as presented in scholarly research studies, descriptions of successful inservice, and basic textbooks in the area. These assumptions are:

Assumption 1: The focus of learning in any content area class is the subject matter; for the teacher and the student this is the most important learning. Reading is the tool to be used and to be strengthened as a student learns the appropriate content.

Assumption 2: Each teacher of a content area should incorporate the reading/thinking skills pertinent to his/her subject area in everyday instruction.

Assumption 3: The reading/learning strategies (or skills) used in reading content-area textbooks, although similar to the reading skills taught in reading class, are slightly different in application.

Assumption 4: Reading/learning skills pertinent to a content area are best taught when the need arises and the content requires specific instruction.

Assumption 5: There is a clear distinction in purpose and method between 1) teaching reading as a subject and 2) teaching students to use reading as a means of acquiring information.

Teacher Corps Projects and Reading in the Content Areas

Teacher Corps projects are ideal settings for improving and institutionalizing better classroom techniques for teaching reading in the content areas.

First, each Teacher Corps project is involved with the continuum of grade and content levels. Reading in the content areas spans middle grade, junior and senior high school classes. Teacher Corps projects, because of commitments and entrees at each of these levels, can facilitate improvement in the content areas by organizing inservice for all teachers of science or for all middle grade teachers or for all eighth grade teachers of English or perhaps for the entire content area staff. Second, the Teacher Corps projects have the advantage of time. A project can plan inservice sessions and follow-up activities over a several year period if desired. Many of the concepts and activities related to reading in the content areas take time to study, assimilate and try. A Teacher Corps project has the opportunity of providing this span for the participants. Third, Teacher Corps projects have the ability to provide both inservice leaders and follow-up, in-classroom support. A major problem of most inservice activity is that there is little, if any, follow-up help for the teachers. If an idea or an activity fails in a teacher's classroom, he/she has no place to turn for feedback and alternate approaches. Likewise, the teacher has no opportunity to share his/her successes or to receive deserved recognition. Teacher Corps projects can supply these crucial elements.

Finally, Teacher Corps projects have the distinct advantage of having a shared decision-making model in operation. Through the needs assessment and analysis procedure much input from teachers about what they perceive as their unique needs and how they wish to see those needs met is obtained. Since the teachers are an integral part of the planning, they should be more committed to its ultimate success.

Conducting inservice on reading in the content areas is never an easy task; there does not appear to be any one pattern of topics or of presentation modes that works for all or even most groups. Teacher Corps projects, however, have the ingredients — commitment, entree, time, staff and the shared decision-making model — for making inservice in reading in the content areas beneficial for teachers and students.

Decisions to be Made: Guidance from the Literature

The Teacher Corps inservice leader will need to make several important decisions about the setting, the participants, the content, and the session organization. The literature, although sparse, provides some suggestions.

Two basic types of articles appear in the literature on inservice in reading in the content areas. One type of article is anecdotal and gives advice. In articles such as Nagle's "Staff Development: Do It Right" (1972), Draba's "Guidelines for Viable Inservice Education" (1975), and Axelrod's "A Few Recommendations on How to Conduct Inservice Reading Instruction for Content Area Teachers" (1975), experienced inservice leaders share their experiences and give advice on how to avoid failure. These articles provide guidance for the Teacher Corps inservice leader in deciding how to organize and structure inservice programs. These opinions are summarized in the section entitled "Experienced Inservice Leaders' Suggestions."

The second type of article appearing in the literature is the report of a specific inservice project. Most of these reports describe the purpose of the inservice program, the participants, the physical arrangements, the content, the instructional process and the evaluation procedures. Herber, for example, in "Reading in Content Areas: A District Develops Its Own Personnel" (1970) describes an inservice project in Norfolk, Virginia. Although in reports of this type the writers seldom say "do this," the descriptions of the designs and procedures can provide many ideas for the prospective Teacher Corps inservice leader. These articles are summarized in the section entitled "Inservice Programs: Workable Models."

Experienced Inservice Leaders' Suggestions

Every inservice leader must make a series of decisions as he/she plans and conducts inservice programs. The literature indicates that there are eight basic decisions.

Decision 1: Who should participate?

There is general consensus in the literature, both for reading in the content areas and inservice in general, that attendance should be voluntary. Sucher (1978), Draba (1975), Axelrod (1975) and many others stress the necessity of having willing participants. The Teacher Corps inservice leader will probably be able to offer a program and encourage, but not force, teachers to participate.

Decision 2: Who should plan?

Again there is consensus among inservice experts. The participants in the inservice program should have a significant voice in selecting modes of learning. Sucher (1978) lists "teacher involvement, initiative and consensus in planning and conducting inservice sessions" as a contributing factor to effective staff development. Nagle (1972) also stresses the importance of finding out the participants' needs and involving them in the planning process. The Teacher Corps document *Planning An Inservice Program: A Process Guide* (1978), developed by Western Washington State College, provides a detailed

description of how to involve faculty members in inservice p'anning; this is a valuable resource for the Teacher Corps inservice leader.

An initial step in involving teachers in planning inservice is the needs assessment process. Allen and Chester (1978) describe a needs assessment instrument that is specific to reading in the content areas and may be a possible format for a Teacher Corps project. The assessment instrument first asks teachers to rate the types of inservice formats, i.e., lecture, workshop, simulation activities, etc. and the possible times and places for inservice sessions. Second, teachers are asked to rate a series of statements three times: first on the basis of importance to their own teaching, second on the basis of frequency of use in their regular teaching, and third on the basis of priority for including in the proposed inservice program. Statements include items about determination of the reading levels of materials, identification and selection of appropriate instructional materials, utilization of various questioning techniques, provision for vocabulary skills development, provision for comprehension skills development and several others.

On the basis of a needs assessment such as Allen and Chester propose or on the basis of some other data, general objectives for the inservice project and specific objectives for each individual session should be established. Experienced inservice leaders consistently recommend that specific goals and objectives be written, publicized and agreed upon by the inservice leader, the participants and the administration.

Decision 3: How should participants be organized?

Many experienced inservice leaders recommend that participants be grouped by content areas or by interest areas. Total faculty meetings in which the English literature teacher, the physical education teacher, and the industrial arts teacher and the science teacher all expect information and activities specific to their own areas are not very successful. It is much easier to provide meaningful techniques and examples if participants are organized by some interest or content area. For example, in the Granite School District in Utah two teams - one in science and math and one in social studies - were formed and inservice sessions were conducted for each team. Another meaningful grouping of participants may be according to student assignments. All teachers working with a specific group of students may be the focus of an inservice training program.

Decision 4: When should inservice programs be held?

Although typically inservice sessions are scheduled after school hours, experts agree that inservice work should be scheduled at "adequate and appropriate times" (Sucher, 1978) and "during the school hours" (Axelrod 1975). Draba (1975) suggests released time. Interestingly, in a project sponsored by the Pennsylvania State Department of Education when teachers were given a choice of released time or of after-school hours with extra compensation, they chose the after-school hours compensation option. Some districts schedule inservice days on Saturdays or inservice weeks in the summer months and offer compensation. The Teacher Corps inservice leader, although not able to offer compensation, may consider the variety of time slots available both during and after school hours.

Decision 5: How many sessions are needed?

There is almost no support in the literature for one-or-two session inservice programs. Dillon (1976) refers to these as "various kinds of one-shot 'dog and pony shows'," "patchwork," and "haphazard." Most projects reported in the literature hold 12 to 15 sessions spread over the school year. Experienced leaders in reading in the content areas speak of the need for time to integrate and experiment with new techniques and ways of thinking.

Draba (1975) stresses the need for continuous inservice. Although most experts advocate follow-up services and continuous renewal, this is not often built into inservice projects.

College credit is often offered for these inservice projects and this undoubtedly influences the number and length of sessions scheduled. It may be profitable to explore ways to manipulate the traditional one, two-hour meeting per week schedule of a college course.

Decision 6: What content should be presented?

Although there is much variety in the topics reported in inservice outlines, there is also surprising uniformity. The most frequent topics are:

1) Readability of textbooks;
2) Diagnostic procedures for determining students' ability to read content area textbooks;
3) Vocabulary development strategies;
4) Comprehension techniques including study guides, directed reading activities, structured overviews;
5) Content and thinking analysis procedures; and
6) Alternate approaches for the poor reader in the content classroom.

Some programs also include word recognition skills, study skills, grouping, and the use of multilevel materials.

Decision 7: How should information be presented?

Sucher (1978), Draba (1975) and others stress the need for divergent, varied activities to accommodate the individual learning styles of the participants. Much research suggests that teachers prefer practical, hands-on inservice sessions.

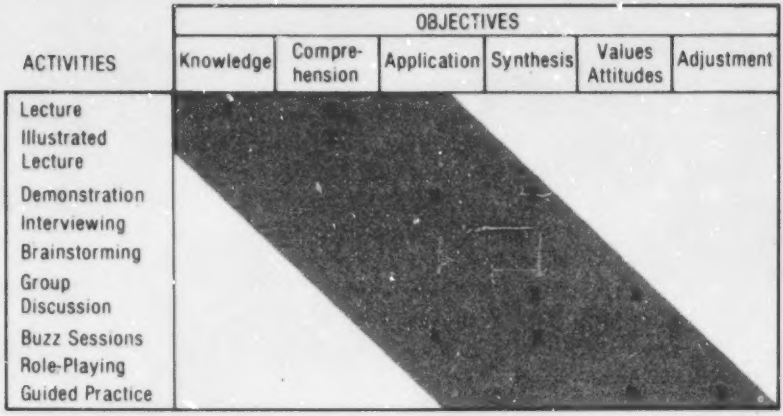
Rubeck (1978) in "How to Conduct Effective Inservice Reading Programs" proposed that lack of skill in conducting the actual inservice session was the reason many programs were unsuccessful. She presented a three-step model for inservice presentations that appears reasonable and usable.

The first step is "tell me" in which the inservice leader explains the objectives and format of the session. The second step "show me" consists of demonstrating the how-to-do-it; this may be through examples or demonstration teaching. The third step is "Let me do it," the hands-on part of the inservice session. Teachers may in this step be involved in creating activities to be used in their own classrooms or may take part in simulated teaching sessions.

This three-step model can be the organizational pattern for a presentation on any of the topics listed under Decision 6. The input step of the model under the "Tell me" and "Show me" could be a lecture, a film, a video tape, group discussion, or demonstration teaching. Within the basic pattern the inservice leader has many choices.

In order to summarize these choices, Harris and Bessent (1969, pg. 80) designed a grid to show the relationship between the type of activities and the expected outcomes. This grid may guide the inservice leader in matching inservice activities and expected outcomes.

DESIGN FOR BROAD-SPECTRUM OBJECTIVES



Decision 8: How should inservice programs be evaluated?

In guidelines for conducting inservice programs evaluation is always presented as an important, ongoing process. Experienced inservice leaders agree that it is important to measure knowledge, attitude and behavior changes and that this should be an integral part of the inservice plan. However, it is very difficult to tap behavior and attitude changes. In many cases the changes may not occur until several months after the inservice is completed; in other cases instruments may not be sensitive enough to measure the changes.

Four types of evaluative techniques are commonly reported in descriptions of inservice programs. These are 1) surveys of participants' feelings about the inservice itself; 2) attitude surveys about feelings and beliefs about reading in the content areas; 3) self-reports and testimonials of changes in behavior and attitudes; and 4) tests of knowledge acquired. Another evaluation technique that is sometimes used is the observation and analysis of teachers' classroom behaviors before and after inservice participation. This may be done through videotaping or through actual observations with an observation system.

Undoubtedly, the best proof of the effectiveness of any inservice training in reading in the content areas is that which documents positive changes in teachers' classroom behaviors. If all other measures are very positive but there is no change in day-to-day classroom behaviors, the success of the inservice program is doubtful.

For some areas such as "knowledge," evaluation instruments are relatively easy to create. For others, particularly in the area of "attitudes," instruments are difficult to find. Although descriptions of inservice projects often report that attitude scales were used, they do not present the actual document and the inservice leader must create his/her own instrument. Smith and Otto (1969) constructed and field-tested a 14-item attitude inventory for content area teachers that may be valuable for the Teacher Corps inservice leader. The instrument, reproduced in the January 1969 *Journal of Reading*, contains items such as:

1. In the secondary school the teaching of reading should be the responsibility of reading teachers only.
2. The teaching of reading skills can be incorporated into content area courses without interfering with the major objectives of these courses.
3. With rare exceptions, students should know what there is to know about reading before they are permitted to leave the elementary school.
4. Every secondary school teacher should be a teacher of reading.
5. Integrating the teaching of reading with the teaching of specific content can be as exciting for the content area teacher as teaching content only.

Teachers are to respond on a five-point scale of: strongly agree, agree, undecided, disagree, strongly disagree with strongly agree for positive statements receiving a weight of 5 and strongly disagree a weight of 1 and vice versa for negative statements. Thus the higher the score the more positive is the individual's attitude toward reading in the content areas.

Inservice Programs: Workable Models

In addition to the opinions and experiences of inservice leaders and researchers, the literature in the field of reading in the content areas and inservice education contains descriptions of successful staff development programs. The ultimate goal of each of these programs is to improve students' reading and learning skills in content areas by improving and/or refining the instructional strategies used by the classroom teachers. A review of the literature indicates that there are at least three organizational approaches that have been used to meet this goal. The approaches can be classified as 1) short term inservice projects, 2) extended inservice projects, and 3) team training.

The primary question is "How can teacher behavior most efficiently and effectively be changed or modified?" Inservice planners, consciously or unconsciously, answer the question as they organize their inservice programs and choose approaches. Certainly, there is no one organizational pattern that will work for all schools or all teachers. The following summaries provide organizational patterns to be considered and adopted or rejected or revised to meet the particular needs of individual Teacher Corps projects.

Short-Term Inservice Approach

The typical inservice model used in reading education in the content areas is a total faculty session consisting of a two-or-three hour lecture/dis-

cussion period with possibly some hands-on activities. Although these sessions are not usually reported in the literature, informal surveys and day-to-day contact with school systems suggest that this is the most common pattern. Smith, Bragsted and Hesse (1970) describe a session of this type. A large city school system was committed to developing a total approach to reading in the secondary school and devoted 25% of its allotted system-wide secondary school inservice time (1 2 day) to reading in the content areas. The program consisted first of a presentation by the system-wide reading director on reading as a three-stage process of decoding, comprehending and utilizing. Following this presentation, a panel of teachers, selected because they were regarded as good teachers and because they were successfully using reading-in-the-content-area techniques, discussed specific strategies they used in teaching their students how to read and use their textbooks. Teachers then attended departmental meetings where they discussed the presentations and asked questions of the reading consultant.

Each participant completed a five-question survey form to evaluate the inservice session. It was found that the teachers generally felt positive about the program. Interestingly, teachers from various disciplines responded quite differently to the questionnaire items. Industrial arts and math teachers were the least enthusiastic with the English, art and language teachers being the most positive.

Undoubtedly this inservice session was beneficial for some of the secondary teachers. However, without more sessions and follow-up support services significant changes in attitudes and/or behaviors are not likely to occur.

Sessions like the one described by Smith, Bragsted and Hesse (1970) are occurring regularly across the nation. The topics may be different — readability may be the focus of the session — but the basic pattern is common. The inservice leaders usually do not believe this is an especially effective model but there are many complex problems. There is limited time allotted to inservice training in most middle, junior high and high schools; there are limited financial resources and many needs. Instructors or inservice leaders who feel comfortable working with econtent area teachers and are knowledgeable about reading in the content areas are not always available. The high school model reported by Smith *et al.*, can be a good starting point for more in-depth, extended inservice work.

Extended Inservice Approach

Some districts, often with the help of state or federal funding, have organized long-term inservice programs. Typically these programs use a formal inservice structure of scheduled meetings, lectures, discussions and hands-on activities in which faculty are given information and ideas to translate into classroom activities. Some programs build in formal consultant follow-up assistance; other programs have follow-up services on an informal, by-request basis.

The descriptions of inservice projects in the literature present a range of organizational patterns. As is typical of most programs reported, these projects were all successful. The evaluation techniques, however, vary from very informal observations and self-reports to formal tests designed to tap knowledge, attitudes and/or behavior changes. Although no one approach

will be adequate for all projects, the Teacher Corps inservice leader may select promising strategies from the following reviews and create his/her own design.

Extended Inservice: Goochland High School, Virginia.

Goochland High School in Goochland County, Virginia, is a rural high school which in 1976 had many students who scored below the state mean on standardized reading tests. The classroom teachers rarely used the textbooks and consistently presented all the necessary information in lectures. An inservice program was designed to improve instruction in the classrooms and to upgrade students' reading and learning skills. Morgan and Kahsar (1977) reported the Goochland process for establishing, conducting and evaluating the inservice in "Inservice Program in Reading for the Rural High School."

The program was held on site at the school and participants could receive one academic credit from the university upon completion of the program. After much careful planning, a consultant was hired to conduct the sessions. Two six-hour day workshops and three monthly faculty meetings were scheduled. During the sessions the teachers spent the majority of the time constructing activities and experimenting with reading and teaching techniques based on the students' textbooks. Demonstrations of multi-level study guides, word recognition activities, vocabulary development strategies, readability formulas, the cloze technique and the directed reading activity were conducted. Follow-up discussions and assistance were provided by the principal, librarian, guidance counselor and the math resource teacher.

The evaluation of the program revealed that teachers saw the course as especially beneficial in improving staff communications. Most of the faculty completed the course for credit and about 85% of the staff reported that they tried techniques or developed materials for use in their classrooms. Observations by the course consultant and the reading specialist corroborated these reports and suggested that major philosophical changes had occurred in about 50% of the staff.

Extended Inservice: Granite School District, Salt Lake City, Utah.

Another extended inservice model was used in the Granite School District, Utah (1975). The system designed an inservice program to develop an integrated approach to teaching content area reading. The objectives of the inservice were 1) to involve content area teachers in establishing readiness for reading and studying a chapter, book, article or selection and in improving student understanding by developing study techniques applicable to specific content area reading and 2) to prepare a packet of classroom-tested materials on the skills discussed in the inservice program.

Two groups of content area teachers, one from science-math and one from social studies, participated in ten weekly workshops of two hours each. Each workshop session was followed by two hours of "self-directed preparation of materials" and four hours of classroom application. The ten workshop sessions, one set conducted for science-math and one for social studies, focused on 1) critical and interpretive skills; 2) critical thinking; 3) comprehension skills; 4) word attack skills; 5) word identification skills; 6) following directions; 7) structural analysis; 8) vocabulary skills; 9) reading-study skills; and 10) summarizing.

Sessions were a combination of lecture, discussion and demonstrations. Teachers then prepared materials to use in their own classes. In the next sessions the participants reported their experiences and revised their techniques.

The project was evaluated through 1) questionnaires; 2) observations; 3) attitude surveys; 4) pre- and post-standardized testing of students; and 5) a compilation of a packet of classroom-tested materials. The participants completed evaluations of each session and of the total program. Comments were primarily positive with some suggestions about possible changes in the time, the method of presenting the course materials and the group membership. By the end of the program the participants produced a packet of materials for their specific disciplines to be used in other schools. The participants at the completion of the inservice sequence believed they were capable of teaching reading skills and reported that they were doing more reading instruction in their classrooms.

The project director reported the following advantages of the inservice: 1) teachers developed materials relevant to their current content and reading assignments; 2) teachers immediately applied the concepts presented in inservice; 3) teachers could immediately judge the effectiveness of the materials and receive help in revising; 4) teachers could take part in ongoing communication with other teachers; and 5) teachers and workshop leaders could continually evaluate personal growth and change techniques and materials if necessary.

Extended Inservice: Rockingham County School System.

At Montevideo High School in Rockingham County School System, Virginia, a two-phase extended inservice program was conducted for five high school teachers and one junior high school teacher (Steele and Laffey, 1976). These teachers were volunteers and received college credit for the first phase of the project and a choice of credit or reimbursement for the second phase. A college reading teacher was the instructor for both phases.

The first phase of the inservice was conducted during a sixteen-week period and concentrated on strategies for integrating reading skills into content area instruction. Specific topics included: locating and using professional resources, recognizing and teaching word recognition skills, specifying instructional objectives, constructing and using study guides, evaluating student reading abilities, recognizing and teaching vocabulary and comprehension skills, using small group and individual reading assignments, and others. Each session contained formative tests, a variety of learning activities, a series of mastery or performance activities and participant evaluation of all aspects of the instructional session.

Phase two was designed to provide participants time and guidance for constructing the educational tools which they learned about in phase one. This phase was held during three weeks in June and the participants developed study guides, prepared vocabulary extension exercises, and constructed group reading inventories and other materials.

In order to evaluate the effectiveness of the inservice program, four measures were constructed or adopted: 1) an attitude inventory designed by

Otto (1969) to measure teachers' attitudes toward integrating reading with content area instruction; 2) a form for teacher evaluation of study guides; 3) a form for student evaluation of study guides; and 4) an eight-item questionnaire about the inservice program. The attitude inventory showed a slight change in a positive direction; the project staff believed that this indicated that "participants at least recognized the importance of integrating the teaching of reading along with subject matter." (1976, p. 27). The study guides received favorable reviews by both teachers and students. Participants felt that the inservice program had provided practical ideas and adequate time to construct materials; the questionnaire evaluations of the program were also very favorable.

Extended Inservice: Pennsylvania Content Area Reading Project.

The Content Area Reading Project (Askov, Dupuis, and Lee, 1978), funded by the Pennsylvania Department of Education, was an extended inservice program and was designed to overcome the pitfalls of "one-shot inservice shows" and "outside experts' one or two hour lectures." The inservice was planned to extend over the entire school year and to use a model incorporating follow-up services in the individual classrooms.

The two objectives of the program were: 1) to change teacher attitude about reading in the content areas and 2) to change teacher behavior in the classroom. In order to accomplish these objectives 15 three-hour inservice sessions were presented and graduate students from the university were hired as school consultants to observe classes, hold conferences with teachers and do demonstration teaching.

Three different schools were involved: one was in an urban setting, one in a rural setting and one in a suburban setting. Sessions were held at the individual schools. Topics for the sessions included informal diagnostic procedures for content areas; teaching procedures to integrate reading skills and content information, readability formulas, teaching techniques for comprehension skills, linguistic differences of students, questioning strategies, vocabulary development and others.

Participants, junior high and adult basic education teachers, volunteered for the inservice program. Three or six graduate credits were available if the teachers wished to register for credit. Interestingly, the teachers were given the option of having released time and meeting during school hours or meeting after school and receiving extra compensation. They elected to receive extra compensation.

Summative evaluation procedures for the program consisted of: 1) an attitude scale; 2) a semantic differential instrument using descriptions of teaching situations; 3) the Purdue Teacher Opinionaire; 4) a criterion-referenced knowledge-of-reading-skills test; and 5) pre and post rating of participants by the on-site consultants. The data indicated that the participants' attitudes toward and knowledge of reading skills did change significantly. Consultant ratings suggested that these changes were also reflected in classroom behavior. Teachers were definitely incorporating reading skills into their content area instruction.

Teachers evaluated the program in terms of the value and usability of each session. In general, they preferred the practical activities (vocabulary

exercises) as opposed to the more theoretical (linguistic differences). They were also quite positive about the follow-up assistance provided by the consultants, a component often neglected in inservice programs.

Extended Inservice: Ohio University/Meigs Local School District Teacher Corps.

In July of 1974 the Teacher Corps project of Ohio University and the Meigs Local School District was initiated. The project was described by Mangieri (1978) in "A Secondary Reading Program that Worked."

On the basis of a needs assessment two specific objectives were established for the Project component at the secondary level. These were the improvement of the reading proficiency of students in the local district and the upgrading of the competency of the school staff in the teaching of reading. Two major activities were initiated to meet these goals. The first involved direct service to students. A reading center was established at the secondary school and staffed by Teacher Corps interns enrolled in Masters programs in reading. The Center operated on a diagnostic-prescriptive approach and provided both remedial and developmental services.

The second phase of the project involved different types of service to teachers; these were 1) formal inservice courses; 2) various types of workshops; and 3) individual staff consultations on reading in the content areas. Teachers could earn university credit for participation in the formal courses. The workshop format was less structured, more short term and more problem-solving; some workshops focused on common problem areas and others on advanced training for teachers who were already having good success in integrating skills. It was felt that the flexible workshop structure recognized the individual needs of teachers and provided an efficient, effective means of meeting these needs. The third form of assistance was the one-to-one consultation. Individual, specific problems could be addressed in these meetings between a teacher and a university consultant.

The project was in operation for two years. At the close of the program, the project planners felt that the inservice program was successful. Teachers reported higher student achievement in content areas and administrators stated that the quality of instruction had also improved. Many teachers also felt they were "doing a better job" of providing instruction.

Extended Inservice: Project Content - Cognition: Reading.

A project conducted in the Cleveland Public Schools approached the inservice pattern in a slightly different way. Instead of beginning by instructing classroom teachers on how to incorporate reading into the content area instruction, the Cleveland project began by having plans and materials constructed for the teachers.

"Project Content-Cognition: Reading" was a comprehensive program for grades 7 through 9. Mills (1978) reported that the program focused on the design and implementation of instructional units based on the directed reading activity procedure. First, a small group of teachers and reading consultants worked together to develop and field test units based on actual textbook reading assignments; the reading skills were incorporated in the unit. Each instructional unit included a pre and post test, an instructional overview

presenting the concepts of the lesson, the lesson objectives, reading skills to be stressed and materials to use, and a day-by-day instructional plan with overhead transparencies, worksheets, and videotapes of parts of the unit being taught. After the units were field tested, they were distributed to teachers throughout the district. Inservice on how the reading skills were incorporated in the units and how to use the materials was conducted at the building level within individual departments. The video-tapes of actual lessons were used to show the effectiveness of the directed reading activity procedure. In follow-up meetings teachers were helped to build their own units using the directed reading activity process.

Program administrators after one year felt that the project was successful. There had been a 40% gain in teacher proficiency in using reading-thinking skill techniques and at the same time teachers were very positive about their opportunities to participate. Students also were reported to be better in comprehension skills.

Extended Inservice: Teacher Corps/Portal School.

Howard University, the Teacher Corps/Portal School and the District of Columbia School System cooperated in establishing a field-centered, competency-based secondary reading methods course (Campbell, 1974). The course consisted of a series of individualized modules which the teachers in the program could complete at a time convenient to them. The university professor was on site one day per week to meet with the teachers individually or in small groups. Two undergraduate assistants were at the school full time to assist teachers in obtaining the packets and keeping records.

The packets, developed on the basis of teacher input, each contained three components; 1) an information section to build an understanding of the theory or rationale underlying a strategy; 2) samples, examples and activities for practice; and 3) opportunities for implementation and evaluation in a classroom situation. Topics included a rationale for teaching reading in content areas, organizational skills as aids to comprehension, directed reading activities, using learning centers in classrooms, comprehension skills, questioning strategies, using contracts in the classroom and others. Videotaped demonstration lessons were part of each instructional packet; the teachers reacted favorably to seeing their colleagues using specific teaching/learning techniques.

Team Building Approach

Another approach to improving reading in the content areas in a particular school is to organize and train a team of teachers to work with the other teachers in the building. This approach has the great advantage of creating a core of regular faculty members who can serve as ongoing resource people and can provide long-term service. It is one method of institutionalizing the ideas of reading in the content areas and hopefully guaranteeing some ongoing activities after initial funding has ended. The team approach has the disadvantage of initially requiring more time to reach all faculty members. The advantage of the ongoing, in-school team should be weighed against the disadvantage of the time required to disseminate ideas in a team approach.

Team Building: Norfolk, Virginia.

Herber in *Reading in Content Areas: A District Develops Its Own Personnel* (1970) described a model used by the city of Norfolk, Virginia to encourage the teaching of reading in the content areas. The program, using seven Title I schools as "target" schools, was based on the assumptions that 1) teachers make a critical difference; 2) content teachers need additional expertise; 3) neither teachers nor consultants need to be "experts" before the program begins; and finally 4) ongoing inservice education is the basic ingredient of success. Rather than conduct inservice sessions for the entire staff, it was decided to train outstanding content area teachers in each of the schools participating in inservice training to become "reading content specialists." One teacher from each of the content areas and one other teacher in each of the seven target schools were invited to participate in the inservice sessions. Each school thus had a team of five teachers, four of whom would in the next academic year become "reading content specialists" for their respective departments and one who would become the coordinator of the school's efforts or the "education development specialist." These teachers participated in a two-stage inservice program. During the school year they attended six two-day sessions during which topics such as comprehension processes, the structure of lessons, vocabulary improvement and evaluation were discussed and demonstrated. Each of the teachers then tried out the techniques in his/her own classrooms. During a four-week summer period the participants spent mornings developing materials to use in demonstrating techniques to their colleagues and in the afternoons "practiced" consulting skills by working with teachers who were teaching summer school courses. In the fall of the year these participants were released from their teaching assignments and assumed their roles as "reading content specialists" in their respective schools and experienced success in their new roles. Because of their familiarity with the content there was no communication gap between the "reading content specialists" and their colleagues. The program was eventually extended to the other schools within the district. The model was felt to be successful in involving teachers in reading in the content areas in an on-going practical working program.

Team Building: Project C.A.R.E.

Cassidy (1973) believes that the problem in reading in the content areas is not identifying the proper procedures or successful techniques but rather it is getting classroom teachers to implement these. He proposed Project C.A.R.E. as a possible solution to this problem. Rather than conduct an inservice series and expect teachers to implement ideas on their own, under Project C.A.R.E. the reading person functioned as a member of a five-person instructional team. The reading person serviced the four other team members, either on a scheduled, assigned basis or on request, by teaching the needed reading skills related to a particular content area to a particular teacher's students while the teacher observed. The reading person might, for example, conduct the vocabulary development activities for a particular science unit. The classroom teacher could see practical techniques used with his/her own students and materials and could receive assistance from the reading team member in preparing a similar lesson. Cassidy believed that under this model reading in the content areas becomes reality.

Summary

The literature in the field of inservice education and reading in the content areas does not provide any magic formula or guaranteed procedure for conducting inservice. The Teacher Corps leader, however, should weigh the experienced inservice leaders' views and the various successful formats and significant topics reported in articles about inservice programs as he/she plans and conducts inservice sessions in reading in the content areas.

Suggested Inservice Activities

Probably there are as many ways of introducing, explaining and demonstrating techniques in reading in the content areas as there are inservice leaders. The following activities are meant as possible approaches to be considered and adapted or discarded, as appropriate. Certainly no one activity is successful with all audiences or for all inservice leaders.

The activities presented here are a **sampling** of approaches. The purpose is to provide a "jumping-off point" for the inservice leader. The suggested activities assume that the inservice leader knows the content, i.e., the directed reading activity, the Herber study guide procedure, comprehension techniques, etc., to be included in these sessions. The fourth chapter of this resource manual provides an extensive listing of sources of information and of samples of student activities for the convenience of the inservice leader. For example, Herber's study guides are described in his textbook *Teaching Reading in the Content Areas*, in Thelen's *Improving Reading in Science*, in the Cincinnati learning activity packet, and in other manuals and textbooks. The inservice leader will find these materials referenced for easy use in the next section of this resource guide.

The suggested inservice activities included here have been selected in accordance with the following assumptions about inservice education and classroom teachers' learning patterns:

Assumption 1) Many content area teachers already teach reading skills without realizing it. Others may not be aware of student difficulties, the demands of the textbooks or the relationship of the students' experiences and backgrounds to the reading. As with any good inservice instruction, the leader must assess teachers' knowledge, attitudes and practices and then must plan accordingly.

Assumption 2) The most effective method of organizing inservice to help the content area teacher investigate the relationship between the content matter and reading skills is to use the teacher's content materials as the basis for analyzing the specific skills and thinking processes required. Teachers can thus see how the skills and processes relate to the content.

Assumption 3) There are several organizational patterns such as workshops, team study, films, etc. that have been successful in increasing teachers' knowledge and skill in teaching reading in the content area. The organization of the inservice will depend on the needs and learning styles of the particular group of teachers.

Creating Awareness and Examining Beliefs

The first session in many programs is designed to introduce participants to the concept of reading in the content areas. The following activities are approaches that have been successful.

Activity 1: Thinking Guide. The purpose of this thinking guide activity is to help participants explore their attitudes and beliefs about reading in the content areas and share their responses with their colleagues.

The thinking guide is a variation of Herber's classroom reasoning guide presented in his book *Reading in the Content Areas* (1978). It consists of a series of statements about a particular topic; the statements are designed to force participants to think about their beliefs and assumptions. The following sample was successfully used in an introductory inservice session in reading in the content areas for secondary teachers.

Thinking Guide

Directions: Read each item carefully, and on the line to the left of each statement mark whether you *agree* or *disagree* with the statement. Be prepared to discuss your opinion.

_____ 1. The most important content a student can learn is the strategies and procedures of acquiring and utilizing knowledge; these strategies should be the focus of subject matter instruction.

_____ 2. A student should function in the manner of the scholar in a particular discipline. "Intellectual activity anywhere is the same, whether at the frontier of knowledge or in a third-grade classroom."

_____ 3. There is in each subject area a body of facts, concepts and generalizations that all secondary-level students should master; these are the essence of education.

_____ 4. It is not possible to teach a student to think.

_____ 5. We can expect transfer and use of reading-thinking skills from one academic area to another.

_____ 6. "A secondary school reading and/or study program cannot exist as a dichotomous curriculum-a strand in which reading and study strategies are first taught *before* application in the content."

Each participant is asked to read each statement and agree or disagree. After all participants have completed the items, they are divided into groups of four or five and instructed to reach consensus on each item. In the process the participants discuss various interpretations of each item and experience first hand the type of thinking and discussion this activity promotes. The inservice leader then asks each group to report and discusses the philosophical approaches to the teaching of content area courses.

Activity 2: Needs Assessment. One possible activity in an introductory session is a personal assessment of teaching procedures. The following checklist is designed to pinpoint daily teaching activities that facilitate students' reading.

Reading-Related Teaching Behaviors -- Content Area Instruction

_____ 1. When introducing a new reading assignment, I provide continuity between the last reading assignment and the new assignment.

_____ 2. When introducing a new reading assignment, I relate the content of the assignment to the students' knowledge and/or experience.

_____ 3. When introducing a new reading assignment, I lead a discussion or demonstration about new concepts within the reading.

_____ 4. When introducing a new assignment, I establish a definite purpose for reading (e.g., "read to find out --"; "read for the most important ideas"; "read to critically review the author's opinion," etc.).

_____ 5. When giving a new reading assignment, I provide a guide for silent reading (e.g., a chart or time line or outline to be filled in while reading, etc.).

_____ 6. In presenting a new assignment, I show the student how to skim the new assignment, how to use the subtitles, how to use the glossary, etc.

_____ 7. After the students have read the assignment, I provide opportunities for the students to ask questions.

_____ 8. After the students have read the assignment, I ask questions at three levels of thinking:

_____ a) literal level
_____ b) interpretative level
_____ c) applied level

The inservice leader may have participants complete the checklist before the session and may wish to collect the forms or may wish to have the participants discuss their responses. If the session is being used to establish goals and objectives for the entire program, this checklist may be one information source.

A second type of needs assessment instrument involves prioritizing a list of skills, techniques and/or strategies. This needs assessment is less threatening than evaluating one's own teaching and provides information about participants' views of the importance of each technique, the frequency of use in present classroom practices and the level of felt need of the person responding. Allen and Chester (1978) presented an assessment instrument for reading in the content areas. The following segment of the instrument illustrates the format and the type of item:

Section Two: Techniques and Strategies (Rate from 1 = low to 5 = high)			
	Important Practices	Present Practices	Priority of needs
1. Determination of reading levels of material			
2. Identification and selection of appropriate supplementary materials			
7. Determination of strategies for dealing with disabled readers			
12. Utilization of questioning techniques			
Section Three: Skill Development			
1. Provision for vocabulary development			
4. Instruction in study skills			

After participants have completed such an instrument, the results can be tabulated and used in establishing objectives for future sessions and/or for group discussion.

Activity 3: Attitude Survey. Estes and Vaughan (1978) have designed an awareness-building activity that combines statements about reading in the content areas and a rating system. The 15-item opinionaire appears in their book *Reading and Learning in the Content Classroom;* the following chart is a section from the opinionaire.

What Do You Think?

Instructions: Place a check in the box that best represents your agreement with the corresponding statement.

	STRONGLY AGREE	AGREE	TEND TO AGREE	UNDECIDED	TEND TO DISAGREE	DISAGREE	STRONGLY DISAGREE
1. A content area teacher is obliged to help students improve their reading ability.							
2. Technical vocabulary should be introduced to students in content classes before they meet those terms in a reading passage.							
3. The primary responsibility of a content teacher is to impart subject matter knowledge.							
4. Few students can learn all they need to know about how to read in the first six years of school.							
5. The sole responsibility for teaching students how to study should lie with reading teachers.							

This instrument can be the basis of a group discussion or can be a pre/post survey of attitudes.

Activity 4: The Ideal Class and the Ideal Student. One non-threatening introductory activity is a small group discussion with a specific, rather "non-personal" task. One possible task is to define the characteristics of the ideal student and ideal class, the "real" student and the "real" class and discuss the differences in terms of what the inservice program might do to bridge the gap. The following chart, a good organizational scheme, can be filled in by the participants.

IDEAL	REAL	POSSIBLE CHANGES
Class	Class	Class
Student	Student	Student

The participants can be grouped by content area specialty or by grade level taught to promote maximum exchange of ideas. Possible changes or topics for inservice that might emerge are grouping patterns, textbook analysis, alternative approaches to question and answer teaching, and vocabulary teaching strategies.

Activity 5: "Shock Treatment." This introductory activity places the participant in the role of a student who is given an unfamiliar reading assignment without any preparation. Osburn (1974) described this procedure in the article *Shock Treatment Inservice Program Adds New Life to Reading.* The major purpose of the activity was "to create an awareness of the dynamics of the reading process as it exists in all readers." Participants were asked to read a difficult selection on city design that was totally unfamiliar to them. They were given no specific directions or told why they were reading the material. After everyone had finished, the inservice leader asked the participants to write their views of the material just read. Again without any discussion or explanation, the inservice leader began a series of three activities. First was a brainstorming session around the general topic of the reading, second was a short filmstrip and third was a small-group simulation activity.

Each of these activities in some way built background information and vocabulary for the reading material. After the activities the participants shared the feelings they had written after they read the material, and then they read the article again. They immediately realized the change in their own reading and understanding and the role of the activities. The inservice leader then distributed a sheet entitled "What Must One Know in Order to Read?" and did follow-up activities.

This type of activity very dramatically illustrates for the participants the feelings of frustration and defeat many students experience with daily reading assignments. Additionally, the activity highlights the significance of preparing students for reading the assignments. Follow-up sessions might explore the demands of content area textbooks, concept development and comprehension instruction.

Exploring the Demands of Reading Assignments

In evaluating any reading assignment the classroom teacher needs to consider these types of information: 1) the content of the material; 2) the readability level; and 3) the skills of the students. The inservice leader will probably wish at some point to discuss these three factors; the following activities are possible beginning points.

Activity 1: Task Analysis. The purpose of this activity is to demonstrate a procedure for teachers to use in analyzing the conceptual and reading requirement of each assignment. The activity works best if the teachers are grouped by subject area and all use the same chapter or segment of reading material in doing the sample task analysis. The inservice leader may wish to choose a chapter from a textbook (or several textbooks) that is unfamiliar to the participants and have it duplicated for this activity.

The following question format is a composite of several analysis procedures. The participants can complete the left side of the form and discuss their responses and then do the right side. Based on their responses, the inservice leader may wish to discuss the value of the process, revisions of the questions to fit particular content areas and strategies for incorporating the reading skills. The inservice leader may then wish to have the participants immediately use the procedure with their own textbooks.

Task Analysis Process
Content Textbooks

CONCEPTS

1. What major ideas do I want my students to know when they finish the assignment?

2. What *details* do I want my students to remember?

3. What personal experiences and knowledge do my students have that relate to this assignment?

4. What additional background do they need?

READING SKILLS

1. What are the words in this assignment I will need to introduce and discuss in detail?

2. What are words I will need to help students but not discuss in any detail?

3. What organizational patterns are used—listing, cause/effect, comparison/contrast, sequence or topical? Are there many dates and facts to be learned? Are main ideas obvious?

4. What study skills are needed (map reading, graphs, following directions, etc.)? What clues to important ideas does the text provide?

Activity 2: Readability Evaluations. Probably one of the most common inservice activities in reading in the content area programs is a session on readability of textbooks. The purpose of the session is typically to make teachers aware of the difficulty level of textbooks used in various classes. Usually the Fry Readability graph is explained and demonstrated by the inservice leader and then teachers use the formula on content area textbooks. Teachers working in teams of two can evaluate the readability of all the texts used in a specific department or in the entire school in a relatively short time. They need, however, to be cautioned about the limited information the formulas provide.

This activity is an excellent starting point for discussions about other factors that make a textbook difficult and about instructional procedures to be used with "too difficult" books. There is always the danger with this topic that the inservice will stop with the identification of the reading level of the textbooks rather than using the information as a stepping stone to the more important questions of what this means for daily instruction. Osburn's "shock treatment" may be a good next step after a readability session.

Activity 3: Informal Group Reading Inventories. Task analysis and readability evaluations are based on the material itself. The third necessary piece of information in assessing the demands of a reading assignment is the level of the students' skills in reading the material. In presenting an inservice session on students' reading skills the inservice leader will probably want to organize a hands-on workshop and establish the goal of constructing an informal group inventory for each textbook. Teachers working in teams can share the construction task, evaluate their inventory and then use the inventory in their classes. The inservice leader will need to have available clear directions on how to construct, administer and interpret a group inventory and several samples in the various content areas. Textbooks such as those by Brunner and Campbell, Burnmeister, Forgan and Mangrum, Shepherd, and others provide good models of informal content area inventories; these books are described in Chapter 4.

Investigating Skills in Reading in the Content Areas

Although the Teacher Corps inservice leader will want to stress that content teachers are not expected to teach reading skills that are not relevant to their particular content areas, the leader will probably at one point want to have teachers identify content-specific skills and to review the reading skills terminology.

Activity 1: One method for having teachers study the content specific skills is to use the following format on an overhead transparency. The participants, using the chart, decide which skills are particularly significant for each subject area and need special attention. Other transparencies listing comprehension and study skills would also be used.

Relevant Skills

	English	Science	Math	Soc. Studies
I Vocabulary Skills				
Using technical terms				
Using "common" terms in new way				
Using symbols				
Using a wide "general" vocabulary				
Using structural analysis				
Using context clues				
Interpreting figurative language				

Having identified the skills most relevant for each subject area, the teachers should then work in small groups to locate examples of each in their own textbooks. By the end of the session the teachers should be able to identify reading passages that require the use of each of the various skills.

Activity 2: Generating Your Own Skills List. The Teacher Corps inservice leader may elect to have teachers generate their own skills list. Although this obviously will take longer than Activity 1, it has the advantages of forcing the participants to be active thinkers and of making the end product a personal document for each teacher. The Teacher Corps inservice leader would begin by having each person write down all the reading skills he/she believes are significant in his/her content area. Teachers from each content area then meet in small groups to compile a master list for the specific content area. The teachers would use their textbooks to verify the need for each identified skill. As the groups are finishing, the inservice leader may wish to give each group a checklist of all reading skills. The master list produced for each subject area can then be used as the basis for further discussions of integrating skills within content instruction.

Developing Vocabulary Instructional Techniques

In planning this inservice the Teacher Corps inservice leader should consider conducting two types of sessions on vocabulary instruction. The first is how to teach and reinforce specific skills such as the use of context clues and the dictionary and the second is how to introduce the important background concepts and particularly difficult new ideas in the assignment before having the students read the material.

Activity 1: Vocabulary Skills Teaching. Helping teachers incorporate the teaching of vocabulary skills in content instruction is a good topic for demonstration teaching. The Teacher Corps inservice leader can assign the participants a role such as "You are ninth graders in health class and I am your teacher. You have just done a worksheet and I have discovered that you are not very good at figuring out the meaning of unfamiliar words from the surrounding context. I am going to . . . " The inservice leader might then use pictures to illustrate the thinking process behind guessing from context and use sentences and paragraphs from the textbook to illustrate how to use the context. Finally, the inservice leader might give the "9th grade students" practice worksheets. The participants in this setting have an opportunity to see how to teach a lesson and at the same time to experience it as a student. The inservice leader may wish to do several of these teaching sessions to illustrate the various vocabulary skills in different content areas.

Activity 2: Make It/Take It Workshop. As a follow-up to Activity 1 or as a session for teachers who know how to incorporate vocabulary instruction in their content instruction, a make it/take it workshop is a good inservice format. The inservice leader can supply materials for making worksheets and activities — dittos, transparencies, pens, scissors, tagboard, paste, etc. — and sample materials. The inservice leader has many sources for examples of vocabulary activities. The *Tactic* series, for example, is written for junior high and high school students and is a good model for presenting and structuring instruction. Teachers can replicate the techniques used for explaining the thinking process behind the skills and can substitute selections from their own textbooks. Burmeister (1978), Herber (1978), Estes and Vaughan (1978), Thomas and Robinson (1977) and many others present excellent ideas for instructional and reinforcement activities. The inservice session may consider organizing a small group "sharing time" at the end of the inservice session.

Activity 3: Introducing Vocabulary. A series of videotapes of actual classes is probably one of the most effective methods of demonstrating various ways of building vocabulary. The Teacher Corps inservice leader may wish to videotape teachers who are known among their colleagues as "good teachers" or may do the teaching himself/herself. One videotape might demonstrate the use of films or filmstrips in developing necessary vocabulary. Another might show an experiment and how the vocabulary can be built into the instruction. Role-playing, class discussions, and simulations may also be techniques shown in videotaped classroom sessions. The structured overview process, too, is a valuable procedure to include in a videotape series.

The Teacher Corps inservice leader would provide a "viewing guide" sheet for participants to complete as they watched the videotapes. The guide would ask the viewer to identify the vocabulary taught, the techniques the teacher used, the reinforcement activities employed and the students' reactions. The Teacher Corps inservice leader can then use the teachers' responses to the videotapes as the basis for a follow-up session on designing and making or locating materials for vocabulary building sessions in particular classes.

If videotaping is not possible, the inservice leader may arrange observation time for participants to visit classrooms to see various vocabulary development procedures or he she may do simulation activities with the participants playing the role of students.

Developing Instructional Techniques in Comprehension

Comprehension of printed materials is undoubtedly the most significant topic to be considered in the reading-in-the-content-area inservice sequence. It is also the most difficult topic to present. First, although researchers have spent much time and energy investigating the comprehension process, there is still no clear-cut, agreed-upon explanation of the process. Second, although there are many suggested procedures for teaching and facilitating the understanding of printed materials in the content areas, there is little, if any, research on many of the methods and there is little evidence that one approach is better than another for all students or for a particular group of students. Thus the inservice leader in presenting information and ideas for teaching and facilitating comprehension in the content area classroom must be ready to introduce many activities and ideas and to deal with teacher frustration with the ambiguity of definitions and the lack of definite answers.

In approaching comprehension in inservice sessions, the inservice leader should make a distinction between "the direct teaching of comprehension skills" and "the facilitating of comprehension through the use of various structuring activities." Both should probably be presented during the inservice sequence.

Activity 1: "Direct" Teaching of Skills. The first type, the direct teaching of skills, involves exploring the comprehension skills needed to read the specific classroom textbook; these skills will include recognizing and understanding complex sentences, the cause-effect writing pattern, understanding the topical organization of a chapter, skimming and reading the charts in the textbook, and many others. A teacher may find that an entire class or a particular cluster of students needs special help in these skills and may do a lesson to meet these particular needs. An inservice session designed to explore the direct teaching of skills can easily be built on the task analysis process presented in this book. The inservice leader can use a simulation activity to demonstrate the teaching of the particular skill by using the textbook materials as examples, reinforcing the skill by doing a worksheet or class activity using material from other parts of the students' textbook and then highlighting the skill in the next regular reading assignment. The inservice leader may wish to have the teachers pretend that they are ninth graders and that they are using a particular math or social studies textbook. The activity works best if all teachers are given the same textbook and actually answer questions and do

the practice activities as if they were ninth grade students. Simulation activities allow the teachers to experience as learners a particular teaching technique and at the time to observe an integrated lesson of instruction, practice and carry-through.

Following such a simulation, the teachers should have adequate time in the workshop session to construct a lesson to use in their own classsrooms with their own materials. As with any learners, the teachers will need time and assistance to convert the information and ideas presented from the knowledge stage to the application level. The time to do planning and design worksheets and class activities is just as important as the time spent in the acquiring of the ideas and must be included in the workshop session to insure some carry-over to the classroom settings.

Activity 2: "Direct" Teaching of Skills. Another approach to demonstrate how to integrate "direct" skills teaching into content area instruction is through observation of a master teacher or through the viewing of a videotape of a master teacher. In either situation the inservice leader should provide a "viewing guide" to be completed by the observing teacher. The guide might be a simple form such as the following:

VIEWING GUIDE
CONTENT CLASSROOM

(In the square draw a diagram of the classroom arrangement.)

1. What reading skill is the teacher teaching? Who is receiving the instruction? The entire class? Individuals?
2. How is the skill explained? How are the students told to think about this skill? Is a step-by-step thinking process presented?
3. How is the skill reinforced or practiced? Worksheets? Activities in small groups?
4. What does the teacher do to highlight the skill as he/she gives the next reading assignment?
5. How do the students respond?

Activity 3: Structuring Class Reading Activities to Facilitate Reading Comprehension. Although "direct" teaching of reading skills is sometimes necessary, the structuring of class and reading assignments to promote understanding of content materials is a necessary, daily process. These activities are the trademarks of a good teacher. There are many instructional and reinforcement structuring activities that an inservice leader may consider in preparing a session. Some of these include 1) study guides (a la Herber); 2) graphic guides to content organization (block outlines, time lines, cause-effect charts, etc.); 3) structured overviews; 4) levels of questioning; 5) chapter cut-ups; 6) learning activity packets; 7) guided group discussion; 8) learning centers; 9) advanced organizers for reading; and 10) directed learning thinking activities. These activities are described in many of the textbooks, manuals and films listed in Chapter 4.

The Teacher Corps inservice leader may wish to do a lecture/demonstration session to show how to construct and or implement some of these techniques. The leader may also conduct a simulation lesson and then discuss the particular technique. Videotaped lessons with a viewing guide provide still another method of demonstrating how these techniques can be used. Since most teachers have not had many "models" of this type of teaching in their own secondary or college education, they usually need to see and experience the approaches before they feel comfortable enough to try them in their own classrooms.

No matter what method is used in introducing and explaining techniques for structuring reading and thinking, the Teacher Corps inservice leader again must provide time for hands-on workshop-type activities. Unless this time is provided, most teachers, although certainly intending to, will not find time to make study guides or design plans for a learning thinking activity. In a workshop setting teachers can work together, can get additional information from the inservice leader, and can take the first steps in changing classroom activities with the support of other teachers and the leader. In follow-up sessions reports on the success or failure of their activities also contribute to the supportive atmosphere and encourage teachers to continue to experiment and share ideas.

Several models presented in section two of this book describe extended inservice using workshop sessions on comprehension. These deserve careful consideration.

Activity 4: Structuring Classroom Reading Activities. The Teacher Corps inservice leader may wish to have teachers explore strategies such as Herber's study guides, Ausubel's advanced organizers, structured overviews, directed learning thinking activities, etc., at their leisure. The inservice leader may construct learning activity packets or purchase appropriate packets such as the Cincinnati Learning Packet and have teachers use these materials at home, before school or during conference periods. Teams of teachers may elect to work together on a particular packet. The inservice leader's role would be to 1) make available the packets; 2) help teachers with any problems in using the materials; 3) help teachers use the ideas in planning activities for their own classes; and 4) conduct follow-up sessions where teachers can share

their experiences and display the materials they have constructed. This approach requires much self motivation on the part of teachers and initial enthusiasm will fade quickly unless the inservice leader has a carefully designed plan for follow-up and assistance.

Activity 5: Alternate Approaches for the Poorer Reader. In most content area classrooms there are students who are not able to read the textbook and understand the concepts without some major adjustments of the assignments, the textbooks, the examinations, and / or the teaching strategies. Some of these students will profit from vocabulary development activities, "direct" reading instruction, study guides, and small group discussions and will be able to do at least part of the required readings. Others will need further adjustments of the instructional and learning activities; these alternative approaches may include 1) audio-tapes of the textbooks with accompanying listening study guides; 2) different textbooks written at a lower readability level (if available); 3) differentiated reading assignments and study guides; 4) peer helpers; 5) films and filmstrips with viewing guides; and 6) oral exams or extended time exams.

In an inservice session the Teacher Corps leader can discuss and demonstrate the various approaches and, as with the other comprehension inservice sessions, provide abundant time for hands-on workshop activities. The inservice leader may also wish to invite the media director to display materials such as films, records and tapes available in the media center that can be used in adjusting instruction and in presenting content-area concepts with a minimum of reading.

In discussing alternative approaches to learning the Teacher Corps leader should be ready to discuss such issues as "reading" vs. "learning," "fairness" of giving extra time or making special arrangments for exams, "excusing" the poor reader from doing the required reading assignments, the role of the remedial reading teacher in the school and, last, the role of the elementary school in preparing students for high school. Although teachers do know that students can learn through ways that involve minimal reading, they are usually very reluctant to endorse these methods. Having abundant resources and being able to provide in-class assistance in implementing these techniques are probably the inservice leader's two greatest tools in encouraging the use of alternate learning approaches.

Summary. Each inservice group and each inservice leader has unique strengths and needs. Certainly the activities suggested here will not match exactly the strengths and needs of any group or any leader. They are meant to be adapted, revised or discarded as the situation requires.

Resources for the Inservice Leader

The Teacher Corps leader has many information resources to tap as he/she designs the total program and plans the individual inservice session.

First, the inservice leader can explore suggestions for structuring and conducting inservice sesssions in books such as Otto and Erickson's *Inservice Education to Improve Reading Instruction.*

Second, the inservice leader may study materials that are designed as "total packages" such as Herber's videotape series, *Teaching Reading in the Content Areas,* or Cincinnati's *Improving Reading Comprehension through the Content Approach* or the Ohio State Department's individualized *Teaching Teen Reading Series.* The inservice leader may decide to buy or rent these materials or may use them as models for his/her presentations.

Third, the inservice leader may seek the assistance of a consultant in reading in the content areas in planning inservice sessions. The consultant can often provide suggestions for presenting instructional techniques to teachers and methods for adapting ideas in this manual to the needs of a particular Teacher Corps project.

Fourth, the inservice leader has many resources that explain and illustrate what reading skills students need and how teachers can incorporate these skills in their daily content-area instruction. These materials include bibliographies, manuals and textbooks devoted to reading in the content areas; Smith's *Teaching Reading in Secondary School Content Subjects* and Herber's *Teaching Reading in the Content Areas* are representative of these books. There are also textbooks in the learning-to-learn area that contain ideas on how a student can improve his/her memory, concentration, note-taking and test-taking skills; although these books are typically designed for the adult or the college student, the information is also relevant for younger students and can be the basis of inservice sessions on helping students become independent learners. Resources in this fourth category outline information and activities that a content-area teacher may need and use such as study guides and vocabulary activities. The inservice leader, using the resources suggested in this manual, can translate the information presented in these books into viable, effective inservice activities.

The following sections list and describe available resources in the above categories. The listing is designed to be used as a convenient compilation of resources. The Teacher Corps inservice leader may find some of these resources pertinent to his/her particular situation and some not relevant or significant.

Resources for Structuring and Conducting Inservice: Books

The materials included in this section are those that deal specifically with inservice in the field of reading. Many other excellent publications address inservice in general and can be used by the Teacher Corps inservice leader in planning his/her program. These references can be found in other bibliographies.

1) Moburg, Lawrence G. *Inservice Teacher Training in Reading*. Reading Information Series, Newark, Delaware: ERIC/CRIER and International Reading Association, 1972 (available from IRA).

Intended Audience. This booklet is written for the research specialist, the college professor and the doctoral student.

Description of the Content. The purpose of the booklet is to present a review of the literature and to provide perspectives on the research and suggestions for those who perform the research. The majority of the studies reviewed involved teachers and students at the elementary level and were conducted between 1963 and 1970. Two studies involving secondary teachers were reported. The authors analyze procedures for measuring change, for evaluating results and for writing research reports.

Ideas and Sections of Particular Value For the Inservice Leader. This booklet provides background information for the inservice leader. If the Teacher Corps inservice project is designed as a research study to investigate the effects of inservice training, this booklet will alert the leader to common pitfalls.

2) Otto, Wayne and Lawrence Erickson. *Inservice Education to Improve Reading Instruction*. Newark, Delaware: International Reading Association, 1973.

Intended Audience. This booklet is written as "a resource for teachers and administrators as they cooperatively design inservice programs which will help each one to more effectively fulfill his role in the educational scheme."

Description of the Content. This publication contains information on 1) the who, where, why of inservice; 2) the process of identifying needs, establishing goals, selecting activities, etc.; 3) the implementation process; 4) inservice formats; and 5) sample programs.

Ideas and Sections of Particular Value for the Inservice Leader. This booklet is an excellent resource for the inservice leader. In 47 pages Otto and Erickson address the major issues and decisions inservice leaders face and give concrete, specific suggestions for approaching inservice. The section on inservice formats discusses the pros and cons of various organizational patterns such as lecture, demonstration, brainstorming, observation and role playing. The final chapter describes inservice programs that have been conducted. The format for presenting these (needs, goals, objectives, activities, evaluation) is a good model for summarizing an inservice program. This booklet should be in every inservice leader's library.

Resources for Structuring and Conducting Inservice: Prepared Materials

Teacher Corps inservice leaders in reading in the content areas may decide to purchase or rent a prepackaged program. Such a package may be used as the total program or in conjunction with other lecture/discussion sessions or hands-on-workshops. It may be used in a group setting or in an

individualized, self-selection format. Such materials may also be valuable as a source of ideas for the inservice leaders on how to present various concepts.

The prepackaged materials are 1) learning packets and 2) films.

Learning Packets: Teaching Teen Reading Series. The Ohio State Department of Education published the *Teaching Teen Reading Series* (1975), an individualized inservice program for reading in the content areas. The series consists of nine individual packets organized as self-instructional learning activity packets. Each packet contains a statement of objectives, a discussion of the topic, application activities, a post test, and a bibliography organized by subject areas. Topics include: 1) assessment of print materials; 2) assessment of student groups; 3) literal comprehension in the content areas; 4) interpretive comprehension in the content areas; 5) vocabulary development in the content areas through word recognition skills; 6) vocabulary development through word meaning; 7) the sequence of the reading lesson; 8) individualization in the content area; and 9) the uses of reading and study skills. The packet on vocabulary development through word recognition skills, for example, presents information on context clues, compound words, prefixes, suffixes and root words, syllabication, the basic phonic principles and the use of the dictionary. Each skill is explained and illustrated through content examples from world history, health, mathematics, science and other areas. Suggested teaching tactics and a criterion-referenced measure are proposed for each skill.

The series is designed to be used as an individualized approach to inservice education but could be used as the basis for a group approach. The explanations are typically quite brief and probably need further expansion and discussion in a group setting.

Learning Packet: Inservice Reading Resource Kit #9. The New York State Education Department has published an individualized packet entitled *Inservice Reading Resource Kit: Package 9 — Reading in Content Areas: Developing Proficiency in the Reading/Study Skills for Content Teachers* (1974). This self-instructional package guides teachers through a self-evaluation and then discusses methods of assessing student needs and ways of differentiating classroom instruction. The material presents explanations of approaches and "teacher tasks" for experimenting with these approaches. Section four, for example, includes explanations of various approaches to structuring instruction such as the SQ3R study method. Learning activities and teacher tasks are designed to have teachers examine sample materials and prepare their own.

Learning Packets: Improving Reading Comprehension through the Content Approach. The Department of Research and Development of the Cincinnati Public Schools under funding from ESEA Title IV - C developed a seven-packet series on content reading. The series is designed for classroom teachers at the secondary level and can be used individually or in groups. Each packet contains an introduction, the "text" or explanation of the process or skill or teaching strategy, a summary statement, and a self assessment which checks the participant's literal and interpretive levels of understanding of the information presented and his/her ability to apply the information to content

areas. Each packet illustrates the principles of content area instruction that the program teaches. For example, the levels of comprehension, study guides and content analysis are consistently used as the design of the text and self assessment sections of the packets. The participant thus not only is told about the procedures but repeatedly experiences them as a learner.

The topics of the seven packets are: 1) an introduction to content reading, 2) content analysis, 3) process analysis, 4) writing study guides, 5) vocabulary development, 6) small group discussions, and 7) evaluation of students' attitudes, skills and progress. Also available are a set of overhead transparencies, model instructional materials, filmstrips/cassettes or sound slide shows, and a trainer's guide.

Although the organization of this material is very similar to the *Teaching Teen Series* published by the Ohio State Department of Education, it is much more extensive in its explanations and examples and addresses different topics. A Teacher Corps inservice leader may consider using the Cincinnati program as a base and supplementing with individual packets from the *Teaching Teen Series*. An edition of the program is now being prepared for teachers of grades four through six and should provide a unique resource for the inservice leader; the vast majority of such materials are designed for junior high and high school level teachers and materials.

Videotape Series. *Teaching Reading in the Content Areas* is a fifteen-part videotaped series by Dr. Harold Herber of Syracuse University. The series is designed to be used as a total inservice package. Each videotape, a half hour long, demonstrates specific reading instructional strategies in math, science, literature and social studies. The videotapes show content area classrooms at the sixth, eighth and tenth grade level. Additional information is available from the TRICA Consultants, Inc., Homer, New York.

Resources for Information about Reading and Teaching Strategies in the Content Areas: Bibliographies

1) Fay, Leo and Jared, Lee Ann (compilers). *Reading in the Content Fields: An Annotated Bibliography*. Revised 1975. Newark, Delaware: International Reading Association, 1975.

This annotated bibliography contains descriptions of articles, books and other materials pertaining to all the major content areas; these were published during the 1965 to 1975 period. The listings are grouped under the headings of general readings, research studies and reports, critical reading and thinking skills, study skills, readability of texts, social studies, language arts and literature, mathematics and science.

2) Fay, Leo (compiler). *Reading in the Content Fields: An Annotated Bibliography*. Revised 1969. Newark, Delaware: International Reading Association, 1969.

This annotated bibliography contains references from the late 1950's through 1968. Descriptions are grouped by the categories of general readings, critical reading in the content areas, mathematics, science, social studies, language arts and literature.

3) Fay, Leo (compiler). *Reading in the Content Fields: An Annotated Bibliography*. Newark, Delaware: International Reading Association, 1966.

This bibliography contains 44 entries ranging in date from 1947 to 1966 with primary emphasis on the 1956 to 1966 time period. The entries, arranged alphabetically by author, include books, journal articles and monographs.

4) Laffey, James (editor). *Reading in the Content Areas*. Bloomington Indiana: ERIC Clearinghouse on Reading and the International Reading Association, 1972. (available from IRA)

This monograph reviews, analyzes and synthesizes the findings of selected research conducted between 1952 and 1972 and describes how the findings of this research can be used in classroom instruction. Some topics considered are reading in literature, reading in mathematics, reading in the sciences, reading in the social studies areas and others.

5) Laffey, James (compiler). *Research on Reading in the Content Fields: Mathematics, Science, and Social Studies*. ERIC/CRIER Reading Review Series, Volume 2, Bibliography 10. Bloomington, Indiana: ERIC Clearinghouse on Reading, 1968. (ERIC #ED024538 RE 001484)

This document contains an annotated bibliography for each of three content areas. Entries date from prior to 1950 through 1967.

6) Harris, Larry (compiler). *Research on Reading in the Content Fields: Language Arts and Literature*. ERIC/CRIER Reading Review Series, Volume 2, Bibliography 11. Bloomington, Indiana: ERIC Clearinghouse on Reading, 1968. (ERIC #ED024539 RE 001485)

This document contains two annotated bibliographies: one for language arts and one for literature. The entries are selected from six basic ERIC/CRIER references and one reference that contains entries prior to 1950.

7) Laffey, James (compiler). *Research on Reading in the Content Fields: General and other Subjects*. ERIC/CRIER Reading Review Series, Volume 2, Bibliography 12, 1968. (ERIC #ED024537 RE 001483)

This annotated bibliography presents abstracts of research articles about reading skills common to all content areas ("general") and about reading in content areas other than literature: language arts, science, social studies, and mathematics. The references date from prior to 1950 to 1968.

8) Sanacore, Joseph. Sources for Teaching Reading in the Content Areas. *Reading Improvement*, Volume 11, Number 1, Spring 1974, pp. 54-57.

In this article Sanacore lists 54 entries related to the teaching of reading in the content areas of social studies, English, science and mathematics.

9) Winkeljohann, Rosemary (compiler). *A Selective Bibliography of ERIC Abstracts for the Teacher of Reading 1966-1974*. Urbana, Illinois: ERIC Clearinghouse on Reading and Communication Skills, 1976. (ERIC #ED127604 CS002920)

This bibliography contains 94 entries dated 1966 to 1974. The listings are grouped into seven subcategories: 1) social studies, 2) English instruction, 3) mathematics instruction, 4) science education, 5) language arts, 6) comparisons and 7) research.

Resources for Information about Reading and Teaching Strategies in the Content Areas: Books

1) Aukerman, Robert C. *Reading in the Secondary School Classroom.* New York: McGraw-Hill Book Co., 1972.

Intended Audience. This book is designed for prospective and practicing teachers of specific content areas.

Description of the Content. With its goal as the improvement of learning in the content areas, this book approaches reading from two perspectives. First, material is provided that applies to all academic subjects and includes such topics as formulating reading assignments, assessing reading ability and helping the poorer student. Secondly, specific techniques for each instructional area are presented.

Ideas and Sections of Particular Value for the Inservice Leader. There are many materials here of use to the inservice planner. In addition to using as a resource the chapters focusing on specific subject areas, the inservice leader should note the approaches described that are adaptable to all subjects. Chapter three is a comprehensive but non-technical explanation of assessing textbook readability. Chapter four provides a clear explanation of the Survey Technique. The planning of reading assignments is detailed in Chapter Six and it includes a useful form for preparing a reading assignment which would encourage teachers to see the necessity of providing for the many aspects of such an assignment.

2) Brunner, J. F. and Campbell, J. J. *Participating in Secondary Reading: A Practical Approach.* Englewood Cliffs, N. J.: Prentice - Hall, Inc., 1978.

Intended Audience. This text is written for preservice and inservice teachers in the content areas.

Description of the Content. The authors created a how-to-text focusing on the reading study skills required in content area courses. In this comprehensive book the topics include using diagnostic information, utilizing student interests, teaching reading study skills, presenting organizational reading skills of outlining and notetaking, and facilitating comprehension through instruction in skills and through study guides, learning centers and unit lessons.

Ideas and Sections of Particular Value to the Inservice Leader. Although the approach is to discuss skills and strategies regardless of the specific subject area, the practical material offered here focuses on the use of the textbook in the classroom. Each of the chapter titles suggests common areas of concern that may be modified for workshops. Because of the de-emphasis of technical terminology, this book is especially appropriate as a classroom teacher's handbook. The many samples also are useful for the inservice planners seeking illustrative material.

3) Burmeister, Lou E. *Reading Strategies for Middle and Secondary School Teachers* (2nd edition). Reading, Massachusetts: Addison Wesley Publishing Co., 1978.

Intended Audience. This text is designed for preservice and inservice teachers in the content areas.

Description of the Content. Based upon the philosophy that teachers should teach the skills necessary for the understanding of course material, Burmeister's text is a comprehensive discussion of such topics as determining how well students read and adjusting materials accordingly, balancing concept building with the course content, developing vocabulary and comprehension, understanding reading rates, and organizing the classroom.

Ideas and Sections of Particular Value for the Inservice Leader. Because this is a comprehensive text for reading thinking skills development in the classroom, the inservice planner will find all of its chapters a practical resource. The first unit, for example, provides material aimed at developing teacher awareness of the need to match the subject material to the students' learning needs. The many "Teaching Strategies" sections provide abundant material for the workshop leader. Useful, too, is the index chart indicating where to find in the text concept activities for specific subject areas.

4) Davis, Kenneth and Hollowell, John (Editors). *Inventing and Playing Games in the English Classroom.* Urbana, Illinois: National Council of Teachers of English, 1977.

Intended Audience. This book is intended as a handbook for English teachers.

Description of the Content. The object of this idea book is to justify and encourage teachers to use games and simulations to teach English. The first section is devoted to a rationale for and an explanation of games in the classroom. Then "Examples of Teacher-made Games" provides models such as "The Publishing Game" and "The Myth Game."

Ideas and Sections of Particular Value for the Inservice Leader. Although the thrust of the suggestions is in the direction of motivating writing activity, "The Myth Game" and "The Game of MacBeth" are creative approaches for motivating, establishing readiness, reinforcing comprehension and allowing for diverse abilities. Another game, "H. Z. Zilch," is an intriguing method for introducing literary analysis, explication of poetry, and working with biographical and historical background. Appendix A is a bibliography which includes games useful to those who teach social studies.

5) Dillner, Martha H. and Olson, Joanne P. *Personalizing Reading Through Instruction in Middle, Junior and Senior High Schools: Utilizing a Competency-Based Instructional System.* New York: MacMillan Publishing Co., Inc., 1977.

Intended Audience. This book is designed to aid the classroom teacher and reading specialist in the secondary school and is best utilized with an instructor's guidance.

Description of the Content. This is a modularized textbook that presents information for refining strategies useful for teaching reading in the content areas. Topics range from identifying vocabulary, comprehension and study skills, to matching students to materials, to adapting a variety of approaches in teaching reading.

Ideas and Sections of Particular Value for the Inservice Leader. Although this text seems geared to the reading teacher rather than the content area teacher and although its format requires an instructor, it offers two useful aspects. First, the explanations of concept skills are concise and easily understood. Further, because the book's format is that of a workbook, the worksheet design of the topical self-assessments and prepared "experiences" can be used by teacher participants in workshops.

6) Earle, Richard A. *Teaching Reading and Mathematics.* Newark, Delaware: International Reading Association, 1976.

Intended Audience. This monograph is intended as material for preservice and inservice teachers of mathematics.

Description of the Content. This book is based on the principle that mathematics teachers must also be teachers of the reading of mathematics. It describes strategies for incorporating instruction in reading skills in daily teaching. Instructional suggestions cover such topics as analyzing content to determine process, perceiving symbols, analyzing relationships, and solving word problems.

Ideas and Sections of Particular Value for the Inservice Leader. The booklet is small, but the quantity and quality of the information it contains are tremendously useful in assisting mathematics teachers in becoming more successful in aiding their students in reading mathematics. Not only are the problems inherent in reading mathematics discussed, but specific strategies are prescribed. Also, of interest are Appendix B, "Words Appearing Most Frequently in Mathematics Texts," and Appendix D, "High Interest Materials for Mathematics Classrooms."

7) Estes, Thomas H. and Vaughn, Joseph L., Jr. *Reading and Learning in the Content Classroom.* Abridged Edition. Boston: Allyn and Bacon, Inc., 1978.

Intended Audience. This book is directed primarily to preservice teachers, but it provides strategies and devices for practicing teachers in both elementary and secondary classrooms.

Description of the Content. The first two units of this text focus on teacher awareness of the reading process in the classroom and the building of that awareness. Unit three is a discussion of instruction as accomplished through a diagnostic approach to classroom material preparation. Finally, two samples of actual units of study using the strategies suggested in the previous chapters are provided.

Ideas and Sections of Particular Value for the Inservice Leader. Because of the numerous charts, questionnaires, and question/activity lists, this book provides many hands-on materials for the inservice trainer. For example, the teacher's attitude scale could serve as a springboard for idea-shaping. Of interest also is the chapter discussing vocabulary which emphasizes game-like activities formulated for diagnostic instruction. The chart of alternate classroom approaches serves as a source of creative classroom activities for teaching concepts with the teacher as a guide or organizer rather than "dispenser of knowledge."

8) Forgan, Harry and Mangrum, Charles. *Teaching Content Area Reading Skills: A Modular Preservice and inservice Program.* Columbus, Ohio: Charles Merrill, 1976.

Intended Audience. This text is designed for content area teachers in elementary through secondary level grades.

Description of the Content. This modular program contains units for ten reading competencies significant for content area teachers. The modules address readability levels, materials preparation, materials suitability, diagnosis, word meanings, comprehension, study skills, word attack, motivation, and the problem reader.

Ideas and Sections of Particular Value for the Inservice Leader. Because of the modular format, this book could be of great use to the inservice planner. The components of each module suggest approaches, objectives and activities easily converted to group exercises. The pre and post-tests could be used for preliminary and follow-up inservice strategies. Useful charts and checklists are also provided to illustrate the concepts. For example, the "Teacher Daily Dozen Checklist" is a revealing series of questions to help teachers examine their practices. The authors have also estimated the time required for completing the suggested activities which is useful information for inservice planning.

9) Graves, Michael F., Palmer, Rebecca J., and Furniss, David W. *Structuring Reading Activities for English Classes.* Urbana, Illinois: National Council of Teachers of English, 1976.

Intended Audience. This handbook is designed as an aid to English teachers.

Description of the Content. This publication's purpose is to justify and explain a strategy for structuring reading activities. The approach is based on four principles: the student's need for success, the limiting of possible errors, encouraging student's independence, and adjusting to the rate at which various students can learn. It discusses planning activities, e.g., establishing reading purpose, and assignment activities, e.g., pre-reading activities.

Ideas and Sections of Particular Value for the Inservice Leader. Because this ERIC booklet is designed to address the concerns of the teacher, the discussion it contains is quite practical for English teachers of middle and secondary schools. The rationale and models are concise and easily understood.

10) Hafner, L. E. (Editor). *Improving Reading in Middle and Secondary Schools* (2nd edition). Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1974.

Intended Audience. This textbook is designed for classroom teachers and reading specialists.

Description of the Content. The information in this text includes an explanation of reading and its principles, vocabulary, comprehension, study skills, skills specific to subject areas, and techniques for aiding the below average reader and the nonreader.

Ideas and Sections of Particular Value for the Inservice Leader. This is a comprehensive college course textbook which discusses reading topics in-depth and, therefore, can provide background information. Of interest to the inservice leader are the unusually extensive chapters directed to specific subject areas strategies.

11) Harker, W. John (Editor). *Classroom Strategies for Secondary Reading*. Newark, Delaware: International Reading Association, 1977.

Intended Audience. This publication is written for secondary content area teachers.

Description of the Content. The booklet is a collection of articles dealing with reading in secondary schools. Section one discusses assessing student reading skills while section two deals with matching those skills with appropriate materials. Sections three and four describe strategies such as alternatives to teacher questions. Section five brings the articles together in a discussion of program development.

Ideas and Sections of Particular Value for the Inservice Leader. This is an excellent booklet for finding quick coverage for such questions as how to initiate a multi-level approach and evaluate students in such an arrangement. The arguments and prescriptions for pre-reading material, for using simulation strategies, for teaching context clues through application of the cloze procedure to content material, and for using the task-analysis procedure are all strategies content teachers could effectively implement.

12) Herber, Harold L. *Teaching Reading in Content Areas*. Second Edition. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1978.

Intended Audience. This book is designed for the content area inservice and preservice teacher in middle and secondary schools.

Description of the Content. Herber consistently stresses the need for teaching content and reading simultaneously and for showing students how to do required tasks. Topics include levels of comprehension, reasoning in, around and beyond reading, organizational patterns, vocabulary development, prediction, simulations, instructional frameworks, and assessment. Each chapter is organized to illustrate the instructional strategies described in the book.

Ideas and Sections of Particular Value for the Inservice Leader. This book provides a clear explanation of the relationship of process and content, the role of the content area teacher in providing reading instruction, and the levels of comprehension. The inservice leader may wish to ask inservice participants to read sections of this book. Additionally, the text contains numerous, well-designed examples of study guides, structured overviews and word meaning activities, which are based on content area selections.

13) Herber, Harold L. (Editor). *Developing Study Skills in Secondary Schools. Perspectives in Reading 4*. Newark, Delaware: International Reading Association, 1965.

Intended Audience. This collection of papers was compiled to aid the secondary classroom teacher.

Description of the Content. The purpose of this anthology on study skills is to help answer the question, "What are factors to consider in producing students who can make proper use of effective study techniques?" Strategies described include word study skills, using book parts, using sources of information, utilizing visual aids in reading materials, and model study skills programs.

Ideas and Sections of Particular Value for the Inservice Leader. Especially recommended is the article about visual aids because of its thorough discussion and useful questions and activities for enhancing a student's ability to learn from this specific aspect of the textbooks.

14) Karlin, Robert. *Teaching Reading in High School: Improving Reading in Content Areas.* Third Edition. Indianapolis: Bobbs-Merrill Educational Publishing, 1977.

Intended Audience. This book is designed for preservice and inservice secondary teachers.

Description of the Content. This textbook focuses on the importance of a school-wide reading program in which content-area teachers are aware of the reading needs of their students and of how those needs might be met. The discussion focuses on reading goals content teachers hold in common. Information is presented on the organization of reading programs to solve reading problems, the psychology of teaching reading, diagnostic teaching of reading, guiding reading of content, improving word identification, comprehension and reading-study skills, and reading for appreciation. Finally, individualization and overcoming reading difficulties are discussed.

Ideas and Sections of Particular Value for the Inservice Leader. Chapter Five provides useful information on reading strategies for teaching content through such activities as surveying chapter content and directed reading. Also recommended is Chapter Eight's discussion of reading-study skills beginning with its list of problems for study and discussion.

15) Lunstrom, John P. and Taylor, Bob L. *Teaching Reading in the Social Studies.* Urbana, Illinois: ERIC/RCS, 1978.

Intended Audience. This book is designed for teachers of the social studies in elementary schools.

Description of the Content. ERIC/RCS, in an effort to provide both research and information, designed this book to introduce teachers to the rationale for teaching reading in social studies and to provide suggestions for improving reading in content-centered social studies classrooms. Included are overviews of the research on this topic, ideas for matching students with textbooks, and strategies for developing comprehension and motivation.

Ideas and Sections of Particular Value for the Inservice Leader. The information here emphasizes reading in the social studies as a developmental process. In spite of the small size of the book, it is highly recommended because of the comprehensive overview it provides. Also useful is the material in the appendices. For example, the prescription for "Personal Classroom Journals" is an easily implemented method for providing purpose, increasing comprehension, and structuring notetaking.

16) Piercey, Dorothy. *Reading Activities in Content Areas.* Abridged Edition. Boston: Allyn and Bacon, Inc., 1976.

Intended Audience. This handbook is intended for teachers of content areas in middle and secondary schools who wish to improve their students' language-coping skills.

Description of the Content. This is an idea book providing the classroom teacher with a means of enlarging his/her repertory of "how to's" for helping students become more successful in specific subject areas. Part I explains techniques for developing vocabulary and generating learner understanding while Part II is a compilation of student activities in specific subject areas.

Ideas and Sections of Particular Value for the Inservice Leader. This book offers many specific activities any classroom teacher could employ. The author suggests that these activities could be a springboard for a skill learning center within every subject area. Each activity is a highly structured lesson organized around content objectives, student preparation, teacher preparation, provision for practice time, and feedback. Inservice trainers will find this book useful in answering questions about individualizing within the classroom and about technical vocabulary in the content areas.

17) Robinson, H. Alan. *Teaching Reading and Study Strategies: The Content Areas.* Second Edition. Boston: Allyn and Bacon, Inc., 1979.

Intended Audience. The book is designed as a textbook for undergraduates and graduate students in reading methods courses for secondary schools and inservice courses in a school.

Description of the Content. Robinson believes that "students learn best when the reading strategies are integrated with the structure of the given content" and focuses his discussion of ideas around the aspects of evaluation procedures, readiness techniques, vocabulary strategies, and comprehension and readability strategies. Topics include: 1) instructional strategies relevant for all content areas with examples drawn from specific content topics; 2) specific writing patterns and strategies in science, social studies, mathematics, English, business, health, home economics, and industrial arts; and 3) reading for lifetime enjoyment and learning.

Ideas and Sections of Particular Value for the Inservice Leader. This textbook presents numerous illustrations of instructional activities a classroom may use. The section on writing patterns is especially complete.

18) Robinson, H. Alan and Thomas, Ellen Lamar, Editors. *Fusing Reading Skills and Content.* Newark, Delaware: International Reading Association, 1969.

Intended Audience. This publication is intended for reading specialists concerned with high school curriculum.

Description of the Content. The collection of articles in this book represents insights into how a content area teacher can improve his/her students' reading. Subjects covered include reading needs common to all content areas as well as reading concerns most important to such subjects as mathematics, home economics, French, art, and others.

Ideas and Sections of Particular Value for the Inservice Leader. The booklet contains much good information about the reading process, the learning of content-area information and the teaching process. The articles by Olive Niles and Eileen Sargent are ones inservice leaders may wish to have teachers read.

19) Shepherd, David L. *Comprehensive High School Reading Methods.* Second Edition. Columbus, Ohio: Charles E. Merrill Publishing Co., 1978.

Intended Audience. The text is intended for prospective teachers and teaching professionals.

Description of the Content. The goal of Shepherd's text is to change the focus of instruction in high school from teaching content to teaching how to read and understand the content. Topics include diagnosis and effective teaching, vocabulary, comprehension, study skills, directed reading-thinking plan, individualization of instruction, and application of reading skills to the specific content areas. Basic instructional procedure with suggestions for individualized instruction are explained for the specific subject areas.

Ideas and Sections of Particular Value for the Inservice Leader. Of use are the specific directions Sheperd provides for constructing a group reading inventory upon which decisions about instructional procedures could be made; every facet a classroom teacher should consider is outlined. Another interesting topic not seen in similar texts is a discussion of the place of the school library in classroom procedure. Additionally, the chapter concerning individualization in the classroom contains a clearly articulated chart which diagrams the forms of grouping, the purpose, advantages and disadvantages of each group form, and ways a teacher may respond to different levels of reading ability. This information can be of great help to the inservice leader.

Also of note to the inservice planner are the lists of problems and questions concluding each chapter. These lists offer specific activities which may be adapted for inservice meetings.

20) Smith, Carl B. *Teaching Reading in Secondary School Content Subjects: A Bookthinking Process.* New York: Holt, Reinhart and Winston, 1978.

Intended Audience. This text is designed as a course textbook for prospective and inservice teachers.

Description of the Content. The philosophy of the book is that the teacher's major goal is to teach the student how to learn from subject-specific texts. With the classroom textbook as the focal point, topics include rationale for and methods of matching students and books, techniques for observing student reading behaviors, vocabulary development, comprehension strategies, and study skills.

Ideas and Sections of Particular Value for the Inservice Leader. Because this text emphasizes the role of the content teacher as a facilitator of the learning of concepts rather than as a reading teacher, it provides many useful suggestions applicable to all subject areas. "Strategies for Coping with Books," Part III, is particularly good.

21) Smith, Carl B. and Elliott, Peggy G. *Reading Activities for Middle and Secondary Schools: A Handbook for Teachers.* New York: Holt, Reinhart and Winston, 1979.

Intended Audience. This handbook was written for content area inservice and preservice teachers.

Description of the Content. Developed as a practical sourcebook, this text suggests specific activities for promoting purposeful reading, vocabulary development, recall, critical thinking, and study techniques. Additionally, the text presents ideas for increasing students' motivation to read.

Ideas and Sections of Particular Value for the Inservice Leader. This book is especially recommended to the inservice planner because of its unusual and yet practical approach to dealing with reading/study skills in the content areas. It introduces methods for dealing with common reading skills. Rather than discussing how to teach each skill, Smith and Elliot illustrate how to do it. The many checklists, models, charts, and samples make this an extremely useful resource for inservice leaders.

22) Thelen, Judith. *Improving Reading in Science.* Reading Aids Series. Newark, Delaware: International Reading Association, 1976.

Intended Audience. This monograph is designed to aid science teachers in middle and secondary grades.

Description of the Content. The booklet contains theory and application. Thelen discusses the issue of content vs. process and describes and illustrates many techniques for strengthening and highlighting the process while teaching the content. She provides information on diagnosing content reading skills, preparing guides and activities to facilitate understanding and vocabulary expansion, and evaluating student learning.

Ideas and Sections of Particular Value for the Inservice Leader. Science teachers should find the models provided here extremely useful. The activities are clearly described and easily implemented. Of note are the informal study skills inventory, illustrated with a physical science textbook, and the selection of reading guides. One advantage of the IRA Aids Series is the feasibility of providing copies to each workshop participant as a future reference and reminder of the concepts introduced by the inservice.

23) Thomas, Ellen Lamar and Robinson, H. Alan. *Improving Reading in Every Class.* Abridged Second Edition. Boston: Allyn and Bacon, Inc. 1977.

Intended Audience. This idea book is written to help reading specialists, classroom teachers, school administrators, and undergraduates planning to teach.

Description of the Content. This book focuses on procedures and devices for improving reading in the classroom. The majority of the suggestions are practical classroom methods in specific subject areas designed to address such skills instructional issues as mastering a textbook chapter, building vocabulary, and coping with wide ranges of reading abilities in a classroom.

Ideas and Sections of Particular Value for the Inservice Leader. Beginning with a subject-area index of specific helps, this book is very valuable for the inservice planner. Practical activities for reading-thinking development are presented with many concrete examples. Such hard-to-find topics as notetaking, classroom libraries, improving the reading of directions, and "First Aid for Physics Students" are discussed.

24) West, Gail B. *Teaching Reading Skills in Content Areas: A Practical Guide to the Construction of Student Exercises.* Orlando, Florida: Sandpiper Press, Inc., 1974.

Intended Audience. This book is designed as a workbook for the content area teacher of the middle or secondary school.

Description of the Content. Based on the philosophy that developmental reading skills should be taught in the content areas while the content is being presented, this workbook provides teachers with directions for preparing activities which prepare students for reading, reinforce vocabulary development and reading comprehension, and emphasize study skills and rates of reading.

Ideas and Sections of Particular Value for the Inservice Leader. Useful activities are suggested for developing a classroom teacher's awareness of the procedures for estimating readability, selecting textbooks, using book parts, interpreting graphics, assessing the student's ability to read content and developing an Informal Reading Inventory. Although there is only one suggested activity for each of the teacher skills listed above, the sample forms could be of use in the preparation of materials for inservice topics. Of special note is a thorough discussion of relating reading rate to purpose.

Resources for Information About Reading and Teaching Strategies in the Content Areas: Manuals and Resource Guides

1) *Social Studies and Reading.* Tallahassee, Florida: Florida State Department of Education, 1975.

This booklet was designed to acquaint social studies teachers with the meanings of reading terms and with some reading skills that can be taught and or reinforced within the social studies classroom. The manual also provides models of activities that can be used in daily instruction in social studies. Sample activities are outlined for vocabulary development, comprehension skills, critical reading and study skills.

2) *A Reading Program for the 70's: Social Studies and Reading.* Atlanta, Georgia: Georgia State Department of Education, 1975.

This manual provides practical activities to help teachers of social studies develop the reading learning skills of their students. Techniques presented include the directed reading lesson, activities for individualizing instruction, readability techniques and others.

3) *Reading Skills Development in Content Areas.* Handbook I. Hampton, Virginia. Hampton City School Board, 1973.

This handbook focuses on the development of reading skills within content area instruction and contains a description of instructional and organizational strategies and sample units. Unit titles include "The Universe," "A New Nation Is Launched," "Fraction Fun," "Water Communities" and others.

4) Mahoney, Joseph E. *Improving Reading Skills in Social Studies. How to Do It Series,* Series 2, No. 1. Washington D.C.: National Council for the Social Studies, 1977.

This document focuses on practical ways to improve reading skills in social studies without sacrificing content objectives and goals. The idea that social studies teachers are best suited to teach the reading skills in their own field is stressed throughout the materials. Topics discussed and illustrated include standardized tests of reading, informal surveys of students' reading habits, content inventories, cloze procedure, vocabulary development, SQ3R, readability formulas, directed purposeful reading, and vocabulary notebooks.

5) *A Reading Manual and Taxonomy for the Social Studies Classroom.* Brooklyn, New York: New York City Board of Education, Bureau of English, 1974.

The purpose of this manual is to assist classroom teachers in developing those reading skills necessary for successful social studies learning. Chapters discuss the supportive emotional climate, diagnosis, reading vocabulary, teaching techniques of reading, a taxonomy as a guide to materials which can be used to teach needed skills. The guide focuses on a social studies approach to the study of Africa and the United States Government.

6) *A Reading Skills Guide for Use in the Content Areas at the Junior and Senior High School Level.* San Mateo County Office of Education and Santa Clara County Office for Education, September, 1971.

This reading skills guide was constructed by a committee in San Mateo and Santa Clara, California, for junior and senior high school content area teachers. The authors' purpose was to "present ideas about ways to individualize instruction in specific basic reading skills that cut across subject matter areas." The corrective reader, diagnostic teaching and assessments of students' reading levels and skills are the focus of sections two and three with discussions and examples of listening tests, informal reading inventories, cloze activities, standardized tests, such as the San Diego Quick Assessment, and teacher-made diagnostic tests in structural analysis, word meanings, contextual meanings, categories, knowledge of textbook parts and main ideas. The majority of the test samples presented use content selections as the test materials. Sections four and five describe ways to develop independent readers and to individualize reading assignments. Sample instructional materials are presented for teaching sentence structure, teaching comprehension skills using a study guide, and teaching rate of reading, skimming, scanning, outlining and notetaking skills. Methods of individualizing reading assignments include student teams for learning specific skills, critical thinking

teams, use of study guides, learning centers, tutors, leveling of assignments, and differentiating assignments. Appendix B contains specific models in each subject area for improving reading comprehension. Although a diagnostic teaching approach is advocated in this manual, the methods and materials are not the typical "skill specific" instructional pattern usually associated with the diagnostic approach. For example, many testing procedures are recommended and sample instructional materials are given for teacher-made test areas; however, most of the activities suggested in sections four and five do not closely parallel the objectives of "finding main idea" or "improving word recognition" that the type of testing instruments would suggest. The ideas presented for developing independent readers and individualizing instruction are excellent and are based on the content material. These can be a valuable resource for the Teacher Corps inservice leader.

Resources for Information about Learning-to-Learn Skills

Learning-to-learn skills are those study habits and procedures that good students automatically, unconsciously use and that mediocre students never seem to master. They are also those skills that classroom teachers assume students have and typically fail to teach or reinforce. For example, most teachers assume students know how to study for examinations. Teacher directions usually consist of "There will be a test next Thursday and it will cover chapters six and seven." Seldom do teachers discuss how much time students should plan for preparation, how to make a master outline, how to answer essay questions that begin with words like "compare" or "interpret." Likewise, scheduling time, taking notes in class, and concentration and memory techniques are usually not taught or systematically reinforced.

In many cases the classroom teacher and sometimes the reading specialist are not very knowledgeable in this significant area. The information is not included in standard textbooks in secondary reading or content area instruction. Rather, the information appears in textbooks for college students on how to study or in popular books such as Lucas' *The Memory Book*.

The books summarized here contain information about efficient and effective study techniques. In most cases the Teacher Corps inservice leader will need to present both the information and the methods of incorporating the learning-to-learn strategies in daily instruction.

1) Hill, Walter. *Point: A Reading-Study System.* Belmont, California: Wadsworth Publishing Co., Inc., 1970.

Intended Audience. This book is written for college students and may be useful for college-bound high school students.

Description of the Content. *Point* is the second book in the *Power in Reading Series.* It provides a practical model for dealing with textbook study and related reading tasks as well as strategies for test-taking.

Ideas and Sections of Particular Value for the Inservice Leader. The system suggested here includes the techniques necessary to textbook reading: scanning, skim-reading, note-taking, and test-taking. Practice activities in various subject areas are provided. Appendix B is an interesting and comprehensive checklist of study skills questions by which the student can monitor how well he/she is applying the skills learned.

2) Laird, Donald A. and Laird, Eleanor C. *Techniques for Efficient Remembering*. New York: McGraw-Hill Book Company, Inc., 1960.

Intended Audience. Information in this book is aimed at the "general" reader: businessmen, professionals, housewives, and students.

Description of the Content. The strategies in this how-to book include techniques to strengthen motivation and to encourage reacting, refreshing memories, and using meaning to improve memory.

Ideas and Sections of Particular Value for the Inservice Leader. As an aid to teaching reading thinking skills the strategies in this book are useful. The techniques suggested for training the mind to recall are also techniques which are practical when approaching textbooks and other classroom material. The discussion of reactivity is especially interesting to anyone concerned with improving thinking skills. Additionally, the anecdotal approach of the information makes this book pleasurable reading.

3) Millman, Jason and Pauk, Walter. *How to Take Tests*. New York: McGraw-Hill Book Co., Inc., 1969.

Intended Audience. This book is designed for high school and college students wishing to improve test taking skills.

Description of the Content. The information in this book is a comprehensive discussion of all facets of test-taking. It includes readiness for the testing situation, types of tests, planning of time, and reasoning techniques to be used in taking tests.

Ideas and Sections of Particular Value for the Inservice Leader. The initial chapter discusses efficient study as the best preparation for tests. This material is especially helpful in that the connection between textbook study and note-taking is emphasized. Also of interest is the chapter on reading directions and questions carefully.

4) Morgan, Clifford T. and Deese, James. *How to Study*. Second Edition New York: McGraw-Hill Book Company, 1969.

Intended Audience. This book is designed for college students although it may also serve college-bound high school students.

Description of the Content. Methods of studying are promoted in this guide through the discussion of such topics as organizing time, efficient use of the textbook, notetaking, and test-taking. Skills necessary for specific subject areas are also highlighted.

Ideas and Sections of Particular Value for the Inservice Leader. This text is a valuable resource. It presents specific and practical techniques that foster successful learning. Chapters 3 through 6 provide comprehensive

approaches to the skills of notetaking, reading with purpose, vocabulary, textbook strategies, and test-taking. Chapters 8 and 9 provide specific approaches to the study of foreign languages, mathematics, and science.

5) Pauk, Walter. *How to Study in College*. Second Edition. Boston: Houghton Mifflin Company, 1974.

Intended Audience. Although this text is intended for college students, college-bound high school students can benefit from its information.

Description of the Content. Pauk provides a comprehensive and practical guide to study skills. Included in the book are strategies for building memory skills, listening to classroom lectures and taking notes, test-taking, writing papers, and study skills specific to various content areas.

Ideas and Sections of Particular Value for the Inservice Leader. Pauk presents many good ideas but of particular note are his sections on notetaking and study techniques for mathematics and science.

6) Raygor, Alton L. and Work, David M. *Systems for Study*. New York: McGraw-Hill Book Company, 1970.

Intended Audience. This is one book in a series designed for college-bound high school students, junior college and college students.

Description of the Content. With the purpose of giving students practical information on the improvement of study skills, this text reviews factors necessary for success including listening and notetaking, preparing for tests, writing a term paper and improving memory.

Ideas and Sections of Particular Value for the Inservice Leader. Although this book contains much interesting material on study skills concepts, of special note are chapters 13 and 14 which deal with study techniques peculiar to foreign languages and science and mathematics. The ideas suggested in Chapter 12 for improving recall are also useful and they may be applied to any subject area.

7) Reiter, Irene M. *The Reading Line*. New York: Cambridge Book Co., 1973.

Intended Audience. This workbook series is designed for high school students.

Description of the Content. The Reading Line Program is a collection of workbooks, each dealing with a specific content area, developed to teach reading/studying/learning skills: reading purposefully, where to look for clues, selecting key words and ideas, taking notes.

Ideas and Sections of Particular Value for the Inservice Leader. This unique program is intended to supplement the classroom textbook and to facilitate the development of reading/learning skills in the classroom. The material in the books is multilevel and provides independent instruction and application.

8) Robinson, Francis P. *Effective Study*. Revised Edition. New York: Harper and Row Publishers, 1961.

Intended Audience. This book is written for college students but may also be of use to high school students.

Description of the Content. This how-to-study book teaches the SQ3R approach to studying and presents strategies for dealing with typical study difficulties such as test-taking, concentration, motivation, preparing reports, and general reading and writing skills.

Ideas and Sections of Particular Value for the Inservice Leader. The information here will be useful because of its thorough discussion of the popular SQ3R study technique. Other strategies of interest are the brief overviews on such topics as the study of a foreign language and skills in test taking.

9) Smith, Donald E. P., General Editor. *Learning to Learn*. New York: Harcourt, Brace and World, Inc., 1961.

Intended Audience. This workbook is designed for college students as self-instructional material.

Description of the Content. The book attempts to instruct the student in the how and why of improving learning skills. The text begins with diagnostic material and then discusses the SQ4R study approach, vocabulary in context, critical reading, content reading, and timed readings.

Ideas and Sections of Particular Value for the Inservice Leader. "Mastering the Content" is an especially useful chapter that includes sample applications of SQ4R to subject areas and offers advice for notetaking.

10) Weinland, James P. *How to Improve Your Memory*. New York: Barnes and Noble Books, 1957.

Intended Audience. This publication is designed for anyone concerned with memory and how to improve it.

Description of the Content. The information in the book ranges from a summary of the research findings on retention to suggestions for improving the ability to remember, including learning and memory devices.

Ideas and Sections of Particular Value for the Inservice Leader. Of special note is Chapter 6 which discusses study methods and, more specifically, learning through reading. The topics covered include use of the senses, efficient reading techniques, writing as an aid to learning, and review strategies. Other ideas of interest are methods for developing one's use of memory devices such as rhyming, numbering and arranging.

Issues and Perspectives: A Summary

Elizabeth Gerald
Reading Coordinator
Teacher Corps/Washington

One of the critical problems facing educators today is the poor reading ability of many high school students. According to a 1977 nationwide survey by the National Assessment of Education Progress for the Right-to-Read which defines functional literacy as "being able to perform tasks necessary to function in American society, such as reading newspapers, instructions and even drivers' license tests," some students do not read well enough to function in our society. The literacy level, according to the 1977 study, has improved among the general population, but 21% of 17-year-old students from low-income areas are functionally illiterate. In order to alleviate the problem, schools and colleges need to develop new instructional strategies for delivering education to young people and new approaches for training both new and experienced teachers.

The United States Congress has addressed many problems which exist in education through the current legislation which focuses on the need to improve basic skills in the school age population, to focus attention on low-income areas, and to deal with effective teacher training. One program in the Office of Education responsible for carrying out this legislation is Teacher Corps.

Its purpose is to strengthen educational opportunities available to children from low income families and to encourage colleges and universities to broaden their programs of teacher preparation and to encourage institutions of higher education and local education agencies to improve their programs of training and retraining for teachers, teacher aides and other educational personnel. One way of doing this is by supporting demonstration projects for retraining experienced teachers, teacher aides and other educational personnel serving in local education agencies. The Operation Branch in the Teacher Corps/Washington Office convened a Task Force of specialists in teaching reading in the content areas to discuss ways to deal with these issues. Following are several ideas and approaches that were generated by the Task Force.

Teaching Reading in the Content Areas

A broad definition of reading which relates to content areas is outlined by Dr. Olive Niles, Connecticut Department of Education:

> Reading includes (1) recognition of, (2) reaction to and (3) use of the meaning behind printed symbols. The reading act . . . may be subdivided into six large interdependent parts. Word recognition, association of meaning with individual printed symbols, literal comprehension, interpretation, evaluation, and assimilation. Each of these basic facets of the reading act is present in some degree in the reading required in any of the content areas. Differences lie in the ways in which the parts are used in handling differing materials and the degree of importance each has in a given subject. (Niles, 1969, p. 2-3)

Authors agree generally that the whole range of reading skills apply to reading in the content areas. Some skills, however, are more important than others in certain content areas. Niles lists three broad skills important for all content areas:

1. Ability to survey materials, set purposes for reading, determine an appropriate technique for reading of any given piece of material.
2. Ability to handle graphic and illustrative materials.
3. Ability to locate, comprehend, and combine information from a variety of library resources.

These skills must be taught simultaneously with the content material (Herber, 1978, p. 4). Content specialists who know the material are in the best position to teach the reading skills necessary for their own subject area. This is one of the important reasons why most of the teaching of reading in the secondary school belongs in content area classrooms (Niles, 1969, p. 15). When the reading instruction is based on the content, it becomes functional and differs from direct teaching of reading skills.

Content teachers need to understand how to teach reading skills important to their subject areas. However, in the training of such teachers, emphasis on separate skills is not the place to begin. Rather these teachers must be taught to analyze their own materials, understand what kinds of problems students have with them, and then learn how to teach specific skills. When properly trained, content area teachers will decide which skills are applicable to a particular lesson and how they will help students use these skills.

To prepare teachers to teach reading in the content fields, Dr. Herber feels the most efficient, economical, and logical approach is to show the regular content area teachers how to teach their students to read the required materials at the same time that they teach them the content of the subject. To accomplish this, some reading specialists must be trained to work with content area teachers. Other specialists should be trained as reading teachers who work with a few severely handicapped students in need of remedial instruction. These two kinds of responsibilities require different skills and, in fact, somewhat different personal qualifications. Content area teachers should not be expected to become reading specialists or diagnosticians. Their instruction in reading should be completely integrated with the teaching of their content.

There are, of course, some students so deficient in reading skills that they need special instruction in addition to the teaching they receive in the content area. They require the services of a reading specialist or consultant.

The teaching of reading within the content areas can be done using a variety of organizational patterns and materials. For example, the attainment of both content and reading skill objectives can result from the effective use of both individual and group activities. Dr. Herber states (1976, p. 12):

> Instruction in this program should accommodate the needs of individual students without losing the value of having individuals interact with one another. It is very difficult to completely individualize instruction in a content area, but one can approximate individualization having students work together in groups on the

> same assignment. As students interact with one another under the guiding hand of the teacher who structures the group interaction, then the needs of individual students can be met in the small groups . . . Particularly since the effort is to teach both content and process, the interaction is of critical importance because it is through discussions, testing of ideas, modification of opinion, gathering of evidence for the ideas being developed, that the learning of the content takes place. The reading and reasoning skills which underlie the interaction are those which we want our students to learn. What better way to learn them?

Additionally, materials other than textbooks can be used for teaching reading in the content areas; these are located in the library: periodicals, newspapers, reference texts. Student interest may be stimulated by the current and realistic information found in the newspaper. The American Newspaper Publishers Association Foundation sponsors the Newspaper in Education (NIE) program to encourage the use of the newspaper as an instructional tool, not only to promote the industry, but also to develop in young people a continuing desire and ability to "read" a newspaper critically and reflectively. Because of its broad coverage of events, the newspaper may be applied to any subject and should certainly facilitate the teaching of reading in content areas.

Inservice training may be organized around exploring the reading skills needed in particular subject areas, designing specific activities, investigating supplementary materials, and reviewing classroom grouping patterns.

Other Considerations for Classroom Instruction

Besides understanding the reading process and its relation to content area instruction and knowing methods for incorporating reading instructions in daily lessons, the classroom teacher must consider other factors.

Understanding the learning process itself is important in dealing with the complexity of teaching reading. Not only are intellectual factors and experience important to learning, but physical and emotional factors must be considered. Children have different needs at various age levels (Havighurst, 1953). The secondary student, like children at other levels, responds to multiple demands. One such demand is the need to find a place in the social order. Although social activities may capture a student's attention and decrease his interest in reading, secondary students must complete the task of adjusting to their own abilities and finding in life a place which is comfortable for them.

It is sometimes assumed that the physical structure of a high school student is stable and completely developed. However, the human body is a dynamic organism and continuous attention should be given to pupil's seeing, hearing and speaking ability, as well as the emotional factors which influence learning. Emotional stability may mean the difference between success and failure. According to George D. Spache (1963, pp. 101-102), these factors greatly affect reading.

In the fullest sense of the term a reading diagnosis is intended to help us understand how the present reading performances are a projection of the reader's self-concept, how they reflect his physical and emotional adjustments to academic demands or to life in general. Reading behaviors are frequently an expression of the reader's attitudes toward the reading task. For example, he may read slowly because of anxiety, distaste for reading, lack of self-confidence, neurotic perfectionalism, or rigidity. The emotional reactions to reading are the basic causes of poor rate as often as the more mechanical factors of habit, poor vocabulary, and the lack of rate training. In addition to these emotional courses, variation in visual, auditory and intellectual powers contribute to reading retardation. Simple description of the present reading skills ignores the role of all the major factors which may contribute to reading disability.

Inservice Planning

The planning that must take place to develop and implement a program to train teachers to improve reading skills in content areas must give adequate consideration to a number of issues. These issues relate to socio/political concerns as well as academic ones.

1. Commitment on the part of several people is necessary before a local training program can be started: teachers, parents, and administrators. Wherever the action begins, all three parties should be involved in planning and carrying out a program. The inclusion of parents in planning should help the success of inservice teacher training and bring the community into the school.
2. In planning programs for teachers of reading in the content areas, local needs will determine much of the activity. Student assessment will be necessary; teacher assessment will also be important, and parents should be given an opportunity to understand the concept of teaching reading in the content areas.
3. The development of these programs should demonstrate the principle of collaboration among school districts, schools of education, and private consultants. Both preservice and inservice training is necessary. The teaching of reading should be an integral part of any program to train content teachers to work in high schools.
4. Time is a crucial consideration in planning an inservice program in most school systems. Unless time has been set aside in the school schedule or appropriate arrangement made for time after school, success in implementing these activities will be difficult.
5. Incentives may add to the desire of some teachers to participate in inservice training. If properly organized and managed, a program for training teachers should not require more monies than those already allocated for on-going staff development.
6. Content teachers should be made fully aware that they are not expected to become reading specialists.
7. Inservice leaders should use the texts and materials that are used in the classrooms as the basis of inservice activities.

Conducting an inservice program on reading in the content areas is never an easy task. However, with adequate time, shared decision-making, support of the administration and creative inservice planning and instruction, Teacher Corps projects can improve educational opportunities for children.

Selected Bibliography

Allen, S.M. and R.D. Chester. Needs Assessment Instrument for Secondary Reading Inservice. *Journal of Reading*, Vol. 21, March 1978, pp. 489-92.

Askov, E., M. Dupuis and J. Yee. An Effective Inservice Model for Content Area Reading in the Secondary Schools. In *Reading: Disciplined Inquiry in Process and Practice*. Milwaukee: National Reading Conference, 1978.

Axelrod, J. A Few Recommendations on How to Conduct Inservice Reading Instruction for Content Area Teachers. *English Journal*, Vol. 64, No. 2, 1975, pp. 81-2.

Burgy, D. Reading Inservice via Videotape. *Reading Teacher*, Vol. 28, October 1974, pp.26-7.

Campbell, J. Staff Development for Content Teachers. *Reading World*, Vol. 17, No. 3, pp. 205-7.

Campbell, J. J. A field-centered, competency-based inservice reading program at an inner-city school. In P.L. Nacke (Ed.) *Interaction: Research and Practices in College-Adult Reading*. Milwaukee: National Reading Conference, 1973.

Cassidy, J. Project C.A.R.E. *Journal of Reading*, Vol. 17, No. 3, December 1973, pp. 192-4.

Cunningham, R. C. Resurrecting Meaningful Inservice Training. *Journal of Reading*, Vol. 15, No. 7, April 1972, pp. 485-7.

Dillon, E.A. Staff development: Bright Hope or Empty Promise? *Educational Leadership*, 1976, Vol. 34, pp. 165-70.

Draba, R.E. Guidelines for Viable Inservice Education. *Journal of Reading*, Vol. 18, February 1975, pp. 368-71.

Edelfelt, R.A. Staff development: What's to be done in the future? In C. W. Beegle and R.A. Edelfelt (Eds.) *Staff Development: Staff Liberation*. Washington, D. C.: Association for Supervision and Curriculum Development, 1977.

Estes, T.H. and R. Staiger. The IRA Project CONPASS: An Overview. *Journal of Reading*, Vol. 16, No. 7, April 1973, pp. 520-4.

Granite School District, Salt Lake City, Utah. *An Interdisciplinary Inservice Model for Teaching Reading in the Content Areas: Grades 7-9, 1975*.

Harris, B.W. and W. Bessent. *Inservice Education: A Guide to Better Practice*. Englewood Cliffs, N. J.: Prentice-Hall, 1969.

Havighurst, R.J. *Human Development and Education*. New York: Longmans, Green & Co. 1953.

Herber, H.L. *Teaching Reading in Content Areas*. (2nd Ed.) Englewood Cliffs, N.J.: Prentice-Hall, 1978.

Reading in Content Areas: A District Develops Its Own Personnel. *Journal of Reading*, Vol. 13, No. 8, May, 1970, pp. 587-92.

Reading Programs, Grades Seven Through Twelve. Unpublished paper. Syracuse University, 1976.

Memory, D. and E. Smith. A Guide to the Organization, Administration of a Content-Area Reading Program. Presentation at International Reading Association Conference, Miami Beach, Florida, 1977.

Morgan, R.F. and P. Kahsar. Inservice Program in Reading for the Rural High School. *Reading Improvement*, Vol. 14, No. 1, Spring, 1977, pp. 21-4.

Nagle, J.E. Staff Development: Do It Right. *Journal of Reading*, Vol. 15, No. 2, November, 1972, pp. 124-7.

Niles, O.S. Reading Skills Common to the Content Areas. In H.A. Robinson and E. Thomas (Eds.) *Fusing Reading Skills and Content*. Newark, Delaware: International Reading Association, 1969.

Otto, W. Junior and Senior High School Teachers Attitudes Toward Reading in the Content Areas. In George B. Schlick and Merrill M. May (Eds.) *The Psychology of Reading Behavior*. Milwaukee: National Reading Conference, 1969.

Osburn, B. Shock Treatment Inservice Program Adds New Life to Reading., *Journal of Reading*, Vol. 18, No. 2, November, 1974, pp. 122-6.

Piecki, G.D. Content Area Reading: A Functional Approach. Paper Presented at International Reading Association Conference, Miami Beach, Florida, 1977.

Kubeck, P. How to Conduct Effective Inservice Reading Programs. *Reading Improvement*, Vol. 15, No. 13, Fall, 1978, pp. 170-1.

Schleich, M. Groundwork for Better Reading in Content Areas. *Journal of Reading*, Vol. 15, No. 2, November, 1971, pp. 119-26.

Smith, R.J. et al. Teaching Reading in the Content Areas — An Inservice Model. *Journal of Reading*, Vol. 13, No. 6, March 1970, pp. 421-8.

Spache, G.D. *Toward Better Reading*. Champaign, Illinois: Garrard Publishing Co., 1963.

Steed, S.M. and R.M. Katrein. Teaming Up With Content Area Teachers. *Reading Improvement*, Vol. 7, No. 1, Spring 1970, pp. 16-17.

Steele, J.L. and J.J. Laffey. Implementing and Evaluating Inservice Programs for Content Teachers. Paper presented at the Annual Meeting of the International Reading Association Southeastern Regional Conference, 1976.

Sucher, F. Staff Development for Reading Teachers. *Journal of Research and Development in Education*, Vol. 11, Number 3, 1978.

White, R.H. Cooperative inservice reading program: reading centers. *Reading Improvement*, Vol. 14, Fall 1977, pp. 144-9.